

Brassiere

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This article is about the female undergarment. For the restaurant, see [Brasserie](#).



Woman wearing a white lace bra.

A **brassiere** ([UK](#) /ˈbræziər/ or [US](#) /brəˈziər/), commonly referred to as a **bra** /ˈbrɑː/, is a woman's [undergarment](#) that supports her [breasts](#). Bras are typically [form-fitting](#) and perform a variety of functions and have also evolved into a fashion item. Women usually wear bras to support their breasts, which may be related to their desire to conform to [social norms](#) such as a [dress code](#). Many women mistakenly believe bras prevent breasts from [sagging](#). In fact, breasts naturally sag as a woman ages, depending on her breast size and other factors. Some researchers have found evidence that wearing a bra may actually contribute to sagging because they weaken the supporting ligaments.

Changing social trends and novel materials have increased the variety and complexity of available designs, and allowed manufacturers to make bras that in some instances are more fashionable than functional. Bras are a complex garment made of many parts, and manufacturers' standards and sizes vary widely between brands, making it difficult for women to find a bra that fits them correctly. Even methods of bra-measurement vary, such that even professional fitters can disagree on the correct size for the same woman. About 90% of [western](#) women wear bras, but about 75–85% of women who wear bras are wearing the wrong size.^[1] Researchers have found a link between obesity and inaccurate bra measurement. A badly fitted bra can contribute to a variety of health problems, including back pain, breast pain, neck and shoulder pain, numbness and tingling in the arm, and headaches.

Some women have sought [breast reduction surgery](#) to lessen the pain and physicians have found that wearing a correctly fitted bra may alleviate the symptoms. Alternatively, other research has shown

that going braless may also eliminate pain. Going braless can be acceptable in certain social circumstances depending on how obvious it is and on the woman's self-confidence. About 10% of women do not wear a bra simply because it is more comfortable. Some garments, such as [camisoles](#), [tank tops](#) and [backless dresses](#), have built-in breast support, alleviating the need to wear a separate bra. It is increasingly common for celebrities to appear braless in public.

The bra has become a feminine icon or symbol with cultural significance beyond its primary function of supporting breasts. Some feminists consider the brassiere a symbol of the repression of women's bodies. Culturally, when a young girl gets her first [bra](#), it may be seen as a [rite of passage](#) and symbolic of her [coming of age](#).^[2]

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Purpose[\[edit source\]](#) | [edit](#)^{beta}]

Bras function by distributing the breasts' weight evenly around a woman's torso. The majority of Western women choose to wear bras to conform to what they feel are appropriate societal norms and to improve their physical appearance.^[3]

Social purposes include minimizing the movement of a woman's breasts and hiding the appearance or visibility of her nipples for [modesty](#) reasons. Conversely, in other situations some women may choose to [draw attention to their breasts](#) by [enhancing](#) their perceived shape and size. Some women

feel more comfortable wearing a bra, although a minority alternatively feel more comfortable without one.

Physical purposes include restricting breast movement during certain physical activities, supporting [sagging breasts](#) to give a more youthful appearance, supporting [prosthetics](#) after surgery, or to facilitate [breastfeeding](#). Some specialized bras are designed for [nursing](#) or [exercise](#).

Bras can also serve both purposes. Western culture places a great deal of importance on [physical appearance](#), especially [body shape](#), and wearing a bra can boost a woman's self-confidence.^[4]

Etymology[[edit source](#) | [editbeta](#)]



Support of the bosom by a bodice (French: *brassière*) from 1900

The term "brassiere" was first used in the English language in 1893.^[notes 1] It gained wider acceptance when the DeBevoise Company invoked the cachet of the French word "brassiere" in 1904 in its advertising to describe their latest bust supporter.^[5] That product and other early versions of the brassiere resembled a [camisole](#) stiffened with boning.^[6] *Vogue* magazine first used the term in 1907,^[7]^[dead link] and by 1911 the word had made its way into the [Oxford English Dictionary](#).^[8] On 13 November 1914, the newly formed U.S. patent category for "brassieres" was inaugurated^[9] with the first patent issued to [Mary Phelps Jacob](#).^[10]^[11] In the 1930s, "brassiere" was gradually shortened to "bra".

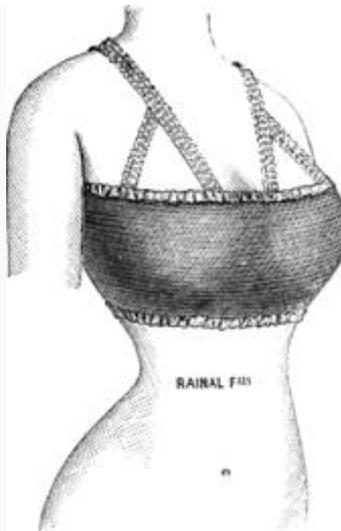
In the French language, the term for brassière is *soutien-gorge* (literally "throat-support"). In French, *gorge* (throat) was a common euphemism for the breast.^[8] This dates back to the garment developed by [Herminie Cadolle](#) in 1905. The French word *brassière* refers to a child's undershirt,

underbodice or harness.^[5] The word *brassière* derives from *bracière*, an [Old French](#) word meaning "arm protector" and referring to military uniforms (*bras* in French means "arm"). This later became used for a military breast plate, and later for a type of woman's corset.

In the French-speaking Canadian province of [Quebec](#), both *soutien-gorge* and *brassière* are used interchangeably. The Portuguese word for bra is *sutiã*, while the Spanish use the word *sujetador* (from *sujetar*, to hold). The Germans, Swedes, Danes and Dutch all use the acronym "BH" which means, respectively, *büstenhalter*, *bysthållare*, *brysteholdere* and *bustehouder* (bust-holder). In [Esperanto](#), the bra is called a *mamzono* (breast-belt).^[12] Despite the large number of nicknames for breasts themselves, there are only a couple of nicknames for bras, including "over-the-shoulder-boulder-holder" and "upper-decker flopper-stopper".^[12]

History[[edit source](#) | [editbeta](#)]

Main article: [History of brassieres](#)



Elastic brassiere from 1907

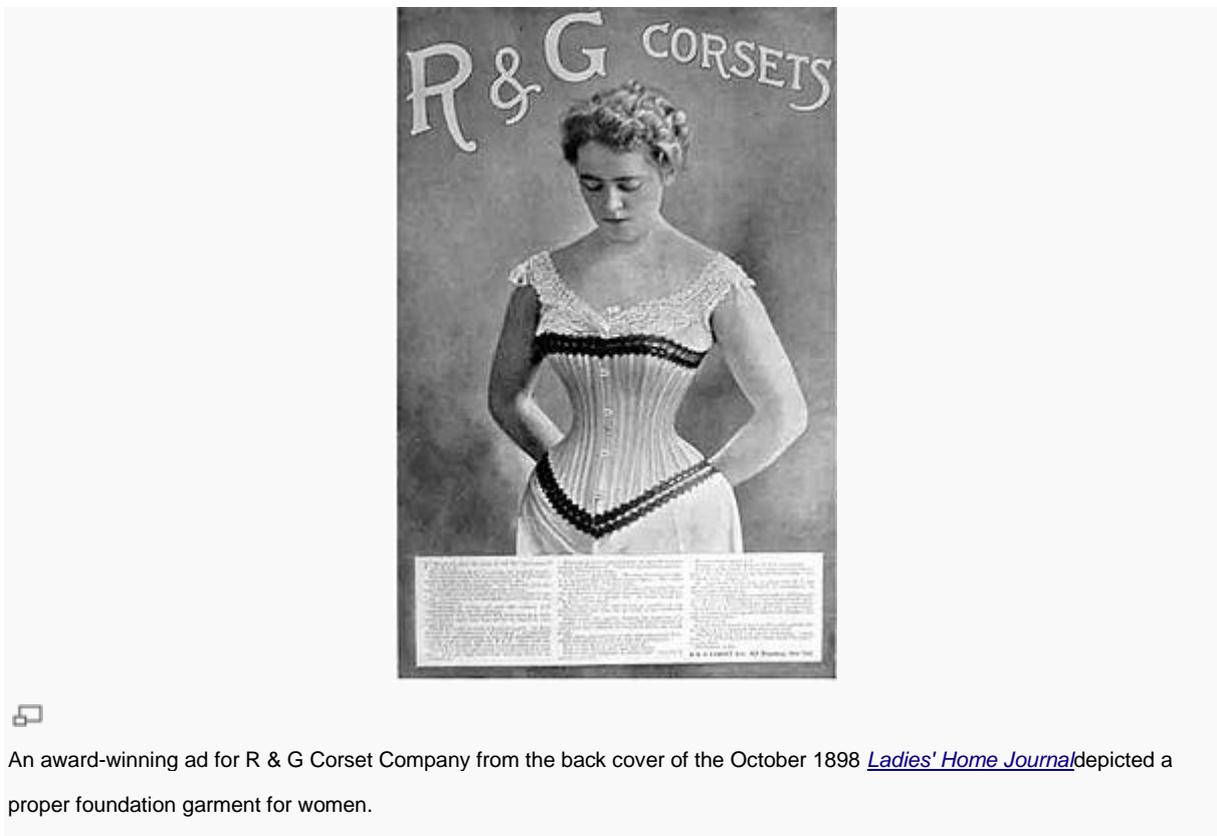


Bra package from second half of 20th century. From the [Museo del Objeto del Objeto](#) collection.

Wearing a specialized garment designed to support a woman's breasts may date back to [ancient Greece](#). Women wore an *apodesmos* ([Greek](#): ἀπόδεσμος^[13]), later *stēthodesmē* (Gr:

στηθοδέσμη^[14]), *mastodesmos* (Gr: μαστόδεσμος^[15]) and *mastodeton* (Gr: μαστόδετον^[16]), all meaning "breast-band", a band of wool or linen that was wrapped across the breasts that was tied or pinned at the back.^{[17][18]}

In 2008 archaeologists working at the [Lengberg Castle](#) in [Eastern Tyrol](#), Austria, discovered 2700 fragments of [textile](#), among them four bras. Two of them were modern looking bras, the other two were undershirts with incorporated cups. All bras were from [linen](#). The two modern looking bras were somewhat similar to the modern longline brassiere with the cups made from two pieces of linen sewn with fabric extending down to the bottom of the torso with a row of six eyelets for fastening with a lace or string. The brassiere also has two shoulder straps and is decorated with lace between the cleavage, one of them possessing [needle lace](#). The [radiocarbon dating](#) results showed that the four bras stemmed from the period between 1440 and 1485.^{[19][20][21][22]}



From the 16th century onwards, the undergarments of wealthier women in the Western world were dominated by the [corset](#), which pushed the breasts upwards. In the later part of the 19th century, clothing designers began experimenting with various alternatives to the corset, trying things like splitting the corset into multiple parts: a [girdle](#)-like restraining device for the lower torso, and devices that suspended the breasts from the shoulder for the upper torso.

The first modern brassiere was patented by the German Christine Hardt in 1889. Sigmund Lindauer from Stuttgart-Bad Cannstatt, Germany developed a brassiere for mass production in 1912 and patented it in 1913. It was mass-produced by Mechanischen Trikotweberei Ludwig Maier und Cie. in Böblingen, Germany. With metal shortages, World War I encouraged the end of the corset. By the

time the war ended, most fashion-conscious women in Europe and North America were wearing brassieres. From there the brassiere was adopted by women in Asia, Africa, and Latin America.^[5]

A design recognized as the modern bra was patented in 1914 in the United States by [Mary Phelps Jacob](#).^{[23][24]}

Like other clothing, brassieres were initially sewn by small production companies and supplied to various retailers. The term “cup” was not used to describe bras until 1916, and manufacturers relied on stretchable cups to accommodate different sized breasts.^{[25]:73} Women with larger or pendulous breasts had the choice of long-line bras, built-up backs, wedge-shaped inserts between the cups, wider straps, power [Lastex](#), firm bands under the cup, and even light boning.

In October 1932, the S.H. Camp and Company correlated the size and pendulousness of a woman's breasts to letters of the alphabet, A through D. Camp's advertising featured letter-labeled profiles of breasts in the February 1933 issue of *Corset and Underwear Review*.^[26] In 1937, Warner began to feature cup sizing in its products. Adjustable bands were introduced using multiple eye and hook positions in the 1930s.^{[25][6][27]:101}

Since then, bras have replaced corsets and bra manufacture and sale has become a multi-billion dollar industry. Over time, the emphasis on bras has largely shifted from functionality to fashion.^[28]

Although in popular culture the invention of the bra is frequently attributed to men, in fact women have played a large part in bra design and manufacture, accounting for half of the patents filed.^[25] There is an [urban legend](#) that the brassiere was invented by a man named [Otto Titzling](#) ("tit sling") who lost a lawsuit with *Phillip de Brassiere* ("fill up the brassiere"). This originated with the 1971 book *Bust-Up: The Uplifting Tale of Otto Titzling and the Development of the Bra* and was propagated in a comedic song from the movie [Beaches](#).^[29]

Construction and manufacturing[[edit source](#) | [editbeta](#)]

For more details on this topic, see [Brassiere measurement](#).



Front of bra illustrating the back wing, cups, and center gore



An adjustable fastener in the bra band allows the wearer to make minor adjustments in her band size. When correctly fitted, the band of the bra is positioned horizontally across the back.

Mechanical design[\[edit source\]](#) | [editbeta](#)]

Bra designers liken designing a bra to building a bridge, because similar forces are at work. Just as a bridge is affected vertically by gravity and horizontally by earth movement and wind, forces affecting a bra's design include gravity and sometimes tangential forces created when a woman runs or turns her body.^[30] "In many respects, the challenge of enclosing and supporting a semi-solid mass of variable volume and shape, plus its adjacent mirror image—together they equal the female bosom—involves a design effort comparable to that of building a bridge or a cantilevered skyscraper."^[30]

Bras are built on a square frame model. Their main components are a chest band that wraps around the woman's torso, two cups to hold the breasts, and [shoulder straps](#). The chest band is usually closed in the back by a hook and eye [fastener](#), but may be fastened at the front.^[31] Some bras, particularly sleep bras or [athletic bras](#), do not have fasteners and are pulled on over the head and breasts. The section between the cups at the front is called a "gore". The section under the armpit where the band joins the cups is called the "back wing".^[32]

Bra components, including the cup top and bottom (if seamed), the central, side and back panels, and the straps are cut based on manufacturer's specifications. Many layers of fabrics are usually cut at once using a computer-controlled laser or a bandsaw shearing device. The pieces may be assembled by piece workers on site or at various locations using industrial grade sewing machines, or by automated machines. Coated metal hooks and eyes are sewn in by machine and heat processed or ironed into the two back ends of the bra band and a tag or label is attached. Some bras now avoid tags and print the label information onto the bra itself.^[32] The completed bras are transported to another location for packaging, where they are sorted by style and folded (either mechanically or manually), and packaged or readied for shipment.^[33]

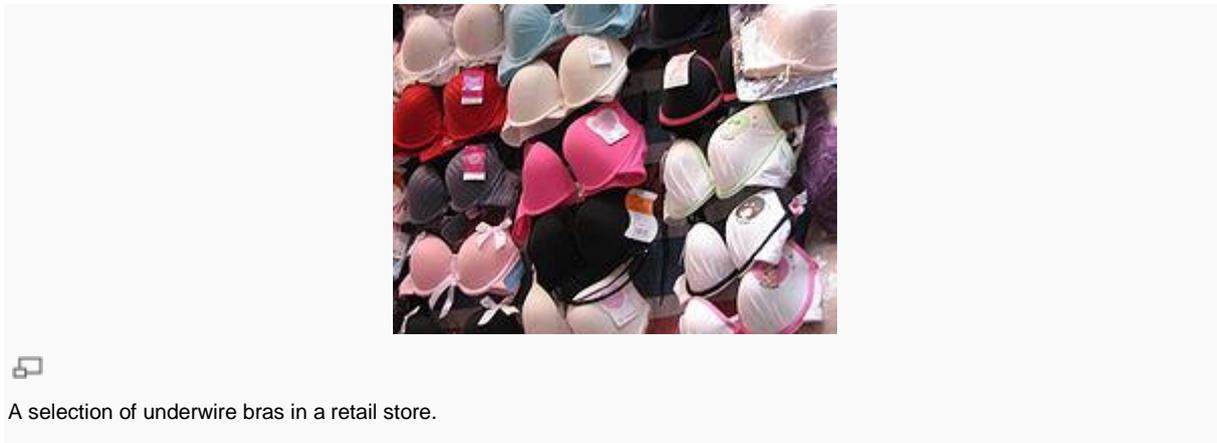
The chest band and the bra cups are designed to support the weight of women's breasts, not the shoulder straps. Some bras, called strapless bras, do not use shoulder straps but rely on underwire and additional seaming and stiffening panels to support the breasts. The shoulder straps of some sports bras cross over at the back, to take the pressure off an athlete's shoulders when arms are

raised. Manufacturers continually experiment with proprietary frame designs. For example, the Playtex "18 Hour Bra" model utilizes an M-Frame design.^[32]

Constructing a properly fitting brassiere is difficult. Adelle Kirk, formerly a manager at the global [Kurt Salmon](#) management consulting firm that specializes in the apparel and retail businesses, said that making bras is complex.

Bras are one of the most complex pieces of apparel. There are lots of different styles, and each style has a dozen different sizes, and within that there are a lot of colors. Furthermore, there is a lot of product engineering. You've got hooks, you've got straps, there are usually two parts to every cup, and each requires a heavy amount of sewing. It is very component intensive.^[34]

Materials^[edit source | editbeta]



Before the advent of modern fabrics, [fabrics](#) like linen, cotton broadcloth, and twill weaves that could be sewn using flat-felled or bias-tape seams were used to make early brassieres. Bras are now made of a wide variety of materials, including [Tricot](#), [Spandex](#), Spanette, [Latex](#), [microfiber](#), [satin](#), [Jacquard](#), foam, mesh, and [lace](#),^[32] which are blended to achieve specific purposes.

Spandex, a synthetic fiber with built-in "stretch memory", can be blended with cotton, polyester, or nylon. Mesh is a high-tech synthetic composed of ultra-fine filaments that are tightly knit for smoothness.^[32]

From 60-70% of bras sold in the United Kingdom and the United States use [underwire](#) in the cup. The underwire is made of metal, plastic, or resin.^{[35][36][37][38]} Underwire is built into the bra around the perimeter of the cup where it attaches to the band, increasing the rigidity of the bra. The underwire improves support, lift and separation.^[31] Wirefree or softcup bras support breasts using additional seaming and internal reinforcement. Some types of bras like T-shirt bras utilize molded cups that eliminate bra seams and hide the woman's nipples. Others use padding or shaping materials to enhance bust size or cleavage.

Manufacturing standards vary^[edit source | editbeta]



A seamstress sews a brassiere in a Puerto Rico garment shop.

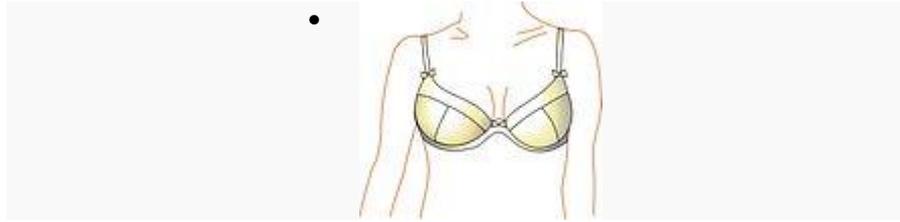
To mass-produce bras, manufacturers size their bras to a prototypical women assuming she is standing with both arms at her sides. The design also assumes that both breasts are equally sized and positioned. Manufacturing a well-fitting bra is a challenge since the garment is supposed to be form-fitting but women's breasts can vary in volume, width, height, composition, shape, and position on the chest.^{[39][40]} Manufacturers make standard bra sizes that provide a "close" fit, however even a woman with accurate measurements can have a difficult time finding a correctly fitted bra because of the variations in sizes between different manufacturers. Some manufacturers create "[vanity sizes](#)" and deliberately mis-state the size of their bras in an attempt to persuade women that they are slimmer and more buxom.^[41] Scientific studies show that the current system of bra sizing is quite inadequate.^[42]

Variance in bra sizes[\[edit source\]](#) | [\[editbeta\]](#)

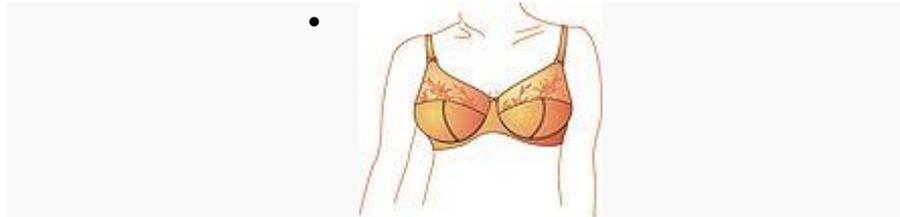
There are several sizing systems in different countries.^[43] Most use the chest circumferences measurement system and cup sizes A-B-C+, but there are some significant differences. Most bras available usually come in 36 sizes,^[44] but bra labeling systems used around the world are at times misleading and confusing. Cup and band sizes not only vary around the world^[45] but between brands in the same country.^[39] For example, most women assume that a B cup on a 34 band is the same size as a B cup on a 36 band. In fact, bra cup size is relative to the band size, as the actual volume of a woman's breast changes with the dimension of her chest.^{[45][46]} In countries that have adopted the European [EN 13402](#) dress-size standard, the torso is measured in centimetres and rounded to the nearest multiple of 5 centimetres (2.0 in).

Types of bras[\[edit source\]](#) | [\[editbeta\]](#)

Main article: [List of brassiere designs](#)



Plunge



Full-cup



Balconette

There is an increasingly wide range of brassiere styles available, designed to match different body types, situations, and outer wear. The degree of shaping and coverage of the breasts varies between styles, as do functionality, fashion, fit, fabric, and color. Common types include backless, balconette, convertible, shelf, full cup, demi-cup, minimizing, padded, plunge, posture, push-up, racerback, sheer, strapless, t-shirt, underwire, unlined, soft cup, and [sports bra](#).^[47] Many designs combine one or more of these styles. Bras are built into some garments like camisoles, single-piece swimsuits, and tank tops, eliminating the need to wear a separate bra.^{[48][49]}

Correctly fitting bras[\[edit source\]](#) | [editbeta](#)

Main article: [Brassiere measurement](#)

Because standards vary so widely, finding a correctly fitting bra can be very difficult for many women.^{[25][50][51]} Medical studies have also attested to the difficulty of getting a correct fit.^[52] Women tend to find a bra that appears to fit and stay with that size for a long period of time.^[39] As a result, 80–85% of women wear the wrong bra size.^{[1][53][54][55]}

Checking band fit[\[edit source\]](#) | [editbeta](#)

Symptoms of a badly fitted bra band include the band riding up the women's back,^[39] indicating that the band is too loose. Experts recommend that the women reduce the band size. If the band digs into the flesh, causing the flesh to spill over the edges of the band, the band is too small.^[56] A woman can test whether a bra band is too tight or too loose by reversing the bra on her torso so that the cups are in the back and then check for fit and comfort.^[57]

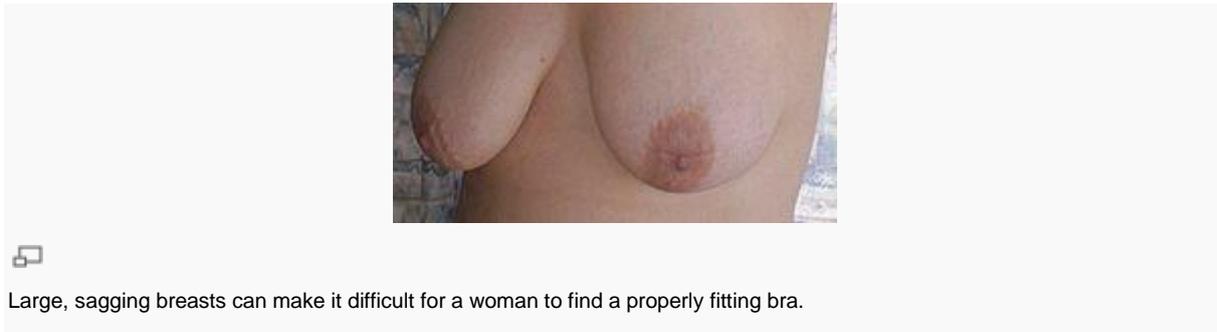
Checking cup fit^[edit source | editbeta]

If a woman's breast tissue bulges out the side of the cup under the arm, under the cup, or over the cup, women should increase their cup size. If the cup fabric is loose, the cup is too large, and women should choose a smaller cup size.^[39] If the shoulder straps dig into the women's skin, the woman should first attempt to adjust the shoulder straps. If that doesn't reduce discomfort, then she should consider a larger cup size. If the straps slide off her shoulder, she should again first attempt to adjust the shoulder straps. If that doesn't help, the woman should consider a smaller cup size. If the underwire doesn't sit on the women's chest or the gore doesn't lie flat between the breasts, this indicates the women should buy a bra with a bigger cup size.^[39]

Bra experts recommend that women, especially those whose cup sizes are D or larger, get a professional bra fitting from the lingerie department of a clothing store or a specialty lingerie store.^[44] Generally, anytime a woman experiences a significant weight change, or if a woman has to continually adjust her bra or experiences general discomfort, the woman should get a new fitting.^[44]

Breasts inevitably sag^[edit source | editbeta]

See also: [*Ptosis \(breasts\)*](#)



Many women mistakenly believe that wearing a bra prevents or slows their breasts from sagging and that breasts cannot anatomically support themselves.^[58] Researchers, bra manufacturers, and health professionals cannot find any evidence to support the idea.^[59] Fashion writers, bra makers, and medical authorities emphasize that wearing a bra is a matter of choice and not necessity.^[60]

Women's breasts naturally sag as a woman grows older. In popular culture, this maturation is referred to as "sagging" or "drooping", although plastic surgeons refer to it as [*ptosis*](#).^[59] Robert Mansell, a professor of surgery at the [University Hospital of Wales](#), in [Cardiff](#), [Wales](#), found in his research that "Bras don't prevent breasts from sagging, with regard to stretching of the breast ligaments and

drooping in later life, that occurs very regularly anyway, and that's a function of the weight, often of heavy breasts, and these women are wearing bras and it doesn't prevent it."^[61]

Former [Playtex](#) Chief Executive Officer John Dixey told interviewers for the British documentary "Bras, Bare Facts" in 2000, "We have no evidence that wearing a bra could prevent sagging, because the breast itself is not muscle, so keeping it toned up is an impossibility.... There's no permanent effect on the breast from wearing a particular bra. The bra will give you the shape the bra's been designed to give while you're wearing it. Of course, when you take it off, you go *au naturel*."^[62] Bras only affect the shape of breasts while they are being worn.^{[62][58]}

Factors affecting sagging[\[edit source\]](#) | [editbeta](#)]

Contrary to popular belief, breastfeeding doesn't contribute to sagging breasts.^{[63][64]} The biggest factors affecting whether and how much a woman's breasts sag are the [number of children](#) she has had, her [body mass index](#), the size of her breasts before pregnancy, and whether she smokes cigarettes.^{[65][66][65][67]} Cigarettes contribute to [sagging](#) because they break down elastin, decreasing the breast's elastic appearance and external support. When breasts sag, the breast tissue folds down over the [infra-mammary fold](#), the point where the underside of the breasts attach to the chest wall. As a result, the breast's lower (inferior) surface lies against the chest wall. In some cases, the women's nipple may even point towards the ground.^[66]

Heredity plays a part in breast size and shape, including helping determine characteristics like skin elasticity and the amount of breast tissue.^[68] Breast skin retains a youthful appearance through the contribution of a protein called [elastin](#). Internally, the [breasts](#) are composed of the [mammary glands](#) which remain relatively constant throughout life, [fat tissue](#) which surround the mammary glands, [milk ducts](#), and [Cooper's ligaments](#). The milk ducts don't influence breast size until a woman becomes pregnant, and again when she begins lactating. It is the amount and distribution of adipose tissue and, to a lesser extent, glandular tissue, that leads to variations in breast size. The exact function of [Cooper's ligaments](#) and their role in supporting breast tissue is not certain.^{[69][70]}

Bras may increase sagging[\[edit source\]](#) | [editbeta](#)]

In France, three multi-year studies found that women's breasts did not sag more after not wearing a bra, and that a woman's breasts may actually sag more due to wearing a bra.^{[71][72][73]} Dr. Laetitia Pierrot and Dr. Jean-Denis Rouillon, sports physician at Centre Hospitalier Universitaire, France have conducted several studies to determine if bras offer support as advertised and whether they prevent women's breasts from sagging.^[74]

In 2003, Dr. Pierrot published the results of a year-long research project.^[75] She closely studied 33 women who were active in sports at least four hours per week. The women agreed to stop wearing a brassiere during both sports activity and at all other times for one year. Their position of their breasts and nipples were biometrically assessed four times during the year. Before the study began, a majority of the women reported some discomfort while wearing a bra. Pierrot found at the end of the

year that 88% of the women reported feeling increased comfort. Her physical assessment of participants showed strengthened rotator and pectoral muscles, fewer stretch marks, and an overall improvement in the height of the women's [nipple-areola complex](#) when measured relative to her shoulder. Contrary to popular belief, the women's breasts did not sag further, but their position on the woman's chest actually improved.^[73]

These findings were confirmed by Dr. Rouillon. In 2007, he published a 3-year-long study of 250 French women.^{[74][71][72]} During the study they measured the relative position of the women's nipples relative to her shoulder blade, while both standing and lying down. The women's breasts were measured every six months during the three-year period. Their breasts showed a statistically significant reduction in the distance from the nipple to the [shoulder bones](#). It also noted that height of the nipples relative to the bottom of the breast improved. Rouillon concluded that women may choose to wear brassieres for social considerations but they do not permanently enhance a woman's bustline.^[74]

In 2013, Rouillon updated his findings after 15 years studying the anatomy of 130 women under the age of 35. He concluded that bras are a “false necessity”^[76] and that they women would be better off not wearing a bra at all.^[76] He concluded that “Medically, physiologically, anatomically – breasts gain no benefit from being denied gravity.” The study found that the breasts of women who went without a bra for more than a year were firmer and sagged less.^[76]

One example is given of a woman who had breasts that were uncomfortably large, and who experienced improvement after two years of not wearing a bra.^[77] Dr. Rouillon theorizes that when women wear bras, the supporting ligaments become underused and weakened, causing breast tissue to sag further when women remove their bras.^[76]

In a much smaller Japanese study, 11 women aged 22-39 years were measured wearing a "well-fitted" brassière for three months and then went without a bra for another three months. The study found that after wearing the specially fitted bra for three months the women's breasts were larger and hung lower. The underbust measurement decreased and the overbust measurement increased, while the lowest point of the breast moved downwards and outwards. The effect was more pronounced in larger-breasted women. This may be related to the particular bra chosen for the experiment, as there was some improvement after changing to a different model.^{[78][79]}

Health issues[\[edit source\]](#) | [editbeta](#)

A badly fitted bra can also contribute to health problems.^{[80][81]} The British Chiropractic Association warned that wearing the wrong bra size can lead to a number of problems, including restricted breathing, abrasions, breast pain, poor posture.^[82] The British Osteopathic Association reported that 60% of British women have experienced pain at some point from wearing a bra, including back pain, neck stiffness, and headaches.^[81] Some women sacrifice their health to wear fashionable bras.^[81]

Large breasts and bra fitting[\[edit source\]](#) | [editbeta](#)

When purchasing bras, larger-breasted women usually have difficulty selecting a well-fitting bra. Buxom women are more likely than smaller-breasted women to wear an incorrectly sized bra. They tend to buy bras that are too small, while smaller-breasted women tend to purchase bras that are too large.^[1] When women wear a bra with too big a band size, the band will ride up on their back which may place pressure on their vertebrae at the top of the back and the bottom of the neck (vertebrae C6 and C7), causing back pain.^[83]

Because it's harder for overweight women or women with larger, heavier breasts to find a well-fitting bra, the bra strap may ride up at the woman's back and put strain on the [trapezius muscle](#), causing back pain.^[84] Large-breasted women who wear a bra with size D or larger cups are particularly likely to experience health problems.^{[85][86]}

Buxom women have unique challenges in finding a correctly fitted bra. This may be due to inaccuracies inherent in the cup size measurement system, which was originally conceived for only four cup sizes: A through D.^[84] Other issues that affect a buxom woman's ability to find the right bra include a lack of understanding of how to correctly determine [bra size](#), difficulty in finding larger cup sizes,^[84] or unusual or unexpectedly rapid growth in size brought on by pregnancy, weight gain, or medical conditions including [virginal breast hypertrophy](#).

In a study conducted in the United Kingdom of 103 women seeking [mammoplasty](#), researchers found a strong link between obesity and inaccurate bra measurement. They found that all of the women in the study wore the wrong bra size.^[84] On average, women in the study were wearing too large a cup size (by a mean of three sizes) and too small a band size (by a mean of four inches).^[84] The researchers concluded that "[obesity](#), breast [hypertrophy](#), fashion and bra-fitting practices combine to make those women who most need supportive bras the least likely to get accurately fitted bras."

Large-breasted women who wear an improperly fitted bra may experience [maceration](#) (loss of skin), chafing, [intertrigo](#) (rash), and fungal infections.^[84]

Asymmetrical breasts[\[edit source\]](#) | [editbeta](#)

In addition to the difficulties already described, up to 25% of women's breasts are persistently and visibly asymmetrical,^[87] which [plastic surgeons](#) define as differing in size by at least one cup size.^{[88][89]} Ten percent of women's breasts are severely different, with the left breast being larger in 62% of cases.^[90] Manufacturer's standard brassiere sizes can't accommodate these inconsistencies which makes it more difficult for women to find a well-fitting bra.

Bras and pain[\[edit source\]](#) | [editbeta](#)



German [pole vaulter Floé Kühnert](#) wearing an athletic support bra

Women wearing poorly fitting bras may experience [breast pain](#),^[80] neck and shoulder pain, numbness and tingling in the arm, and headaches.^[91] Among a group of 31 British women who requested [reduction mamoplasty](#), 81% complained of neck and back pain, while 77% complained of shoulder pain.^[92]

One long-term clinical study in 1987 showed that women with large breasts can suffer shoulder pain from wearing bras.^[93] In the study, E. L. Ryan of the [University of Melbourne](#) and colleagues found that the inherent design of bras causes fatigue and possibly shoulder pain. They showed that when women perform an activity that requires them to raise their arms above shoulder level, the weight of the woman's breasts are transferred from the band around her torso to the bra straps. Bra straps put downward pressure on the [scapula](#), effectively turning the shoulder into a pulley, doubling the total downward pull on both shoulders.^[94] The tension may be continuously present in large or heavy-breasted women.^[95] Researchers in Turkey found that women with who wore bras with cup sizes D and above experienced upper back pain due to changes in the curvature of the spine.^[94]

In Japan, about 13% of women report experiencing some form of shoulder [pain](#),^[95] while in a 2006 survey of 339 female hospital employees, 59% of the respondents said their bra causes them to occasionally experience back, shoulder, or neck pain. The majority cited their bra straps as the biggest problem.^[96]

A woman who wears a bra with bra straps that are too tight puts extra pressure on the trapezius muscles that can lead to chronic pain.^[97] Tight bra straps transfer the weight of the breasts to the [scapula](#) and puts direct pressure on the [serratus anterior](#) and [trapezius](#) muscles which serve to elevate the scapula. The muscles become fatigued which may lead to back, shoulder and neck pain.^{[94][98]} Even strapless bras can cause problems for larger-breasted women. They put all the breasts' weight onto the chest band and cause extra strain onto the rib cage and back.^[93]

Bras and physical activity[\[edit source\]](#) | [editbeta](#)



Two women exercising while wearing a [sports bra](#).

Up to 56% of women report some kind of breast pain when taking part in strenuous physical activity or exercise.^[80] A well-fitted bra, especially a [sports bra](#), can help alleviate symptoms. Physicians recommend women who are experiencing breast pain may be able to reduce symptoms by wearing a better-fitting bra.^{[99][84][100]} A 1976 study of 114 women in the United Kingdom complaining of breast pain were professionally fitted with a special, custom-fitted bra. Twenty-six percent of women who completed the study and wore the bra properly experienced pain relief, 49% improved somewhat, 21% received no relief, and 4% experienced more pain. There were a lot of dropouts from the study.^[83]

Some occupations require women to repeatedly raise their arms above the shoulders. Female volleyball, [high jump](#), or [long jump](#) athletes must continually lift their arms above their shoulders. This can cause the shoulder straps to dig in, putting the athletes at risk for shoulder pain. Even smaller-busted women who repeatedly lift their arms while wearing a poorly designed or badly fitted bras can experience shoulder pain.^{[62][50]}

To compensate, female athletes can wear athletic or [sports bras](#),^[101] which are more effective than ordinary bras at reducing breast pain caused by exercise.^[80] However, sports bras may not meet some larger-busted women's needs. Judy Mahle Lutter, president of the Melpomene Institute, a Minnesota-based research organization devoted to women's health and physical activity, reports that "Larger-breasted women, and women who are breast-feeding, often have trouble finding a sports bra that fits, feels comfortable and provides sufficient motion control."^[101]

Bra-free relief from pain [\[edit source\]](#) | [\[edit beta\]](#)



Two women exercising and wearing [sports bras](#) on [Cayucos State Beach](#), Cayucos, California

However, the need for wearing a bra at all during exercise has been questioned after extensive studies of athletes.^[73] In a French study, women who went braless were no more likely than women who wore bras to experience back pain.^[76] Some women even reported that the lack of a bra helped to reduce back pain.^[76] British research has indicated that post-menopausal women who wear a bra are more likely to suffer breast pain.^[76]

There are two studies that show going without a bra can reduce shoulder pain^{[95][93]} and one that wearing a bra can actually increase the amount that breasts sag.^[102] A Japanese study in 2012 of 339 women found that overweight women tended to have larger breasts, but that brassiere cup size was more indicative of the weight of the breasts than their breast size. They correlated cup size over breast size to shoulder-neck pain, which occurred in 13% of study participants.^[95]

This is consistent with other literature that suggests that it is wearing bras, and not a woman's breast size, that causes larger-breasted women to experience [breast pain](#). Two studies have found that going braless can help resolve shoulder and neck pain and may be a preferred treatment over reduction mammoplasty.^{[95][93]}

According to a study published in the *Clinical Study of Pain*, large-breasted women can reduce back pain by going braless. Of the women participating in the study, 79% decided to stop wearing bras completely.^[103]

In a five-year study, 100 women who experienced shoulder pain were given the option to alleviate the weight on their shoulders by not wearing a bra for two weeks. In that two-week period, a majority experienced relief from pain. Relief was complete among 84% of women who did not elevate their arms. However, their pain symptoms returned within an hour of resuming bra use. Three years later, 79% of the patients had stopped wearing a bra "to remove breast weight from the shoulder permanently because it rendered them symptom free." Sixteen percent worked in occupations requiring them to elevate their arms daily, and this group only achieved partial improvement. Of these, 13 of the 16 ceased to wear a bra, and by six months all were without pain.^[93]

Fibrocystic disease and breast pain[\[edit source\]](#) | [editbeta](#)

Main article: [Fibrocystic breast changes](#)

Numerous websites and publications dealing with [fibrocystic disease](#) and breast pain state that a well-fitting bra is recommended for treatment of these conditions.^{[104][105]} A 2006 clinical practice guideline stated, "The use of a well-fitting bra that provides good support should be considered for the relief of cyclical and noncyclical mastalgia." The study rated the statement as being supported by level II-3 evidence and as a grade B recommendation.^[106] However, this rests solely on two short, uncontrolled studies.^{[100][107]}

In a 2000 study in Saudi Arabia, 200 women were randomly allocated to receive either [Danazole](#), a synthetic [steroid ethisterone](#) whose off-label uses include management of [fibrocystic breast disease](#) and [breast pain](#), or a sports bra. Fifty-eight percent of the Danazole group improved compared to 85% in the sports bra group.^[100] No details of what the women wore before the study was given. Neither study used an untreated control or implemented [double-blind](#) controls. Breast pain has a very high placebo response (85%)^[106] so a response to any intervention can be expected. It is not clear whether the interventions described can be generalized to a large population.

Culture and fashion^[edit source | editbeta]



Pin-up photo of Jane Russell in a bullet bra for the 21 September 1945 issue of [Yank, the Army Weekly](#), a weekly U.S. Army magazine staffed by enlisted men.

Modern bras were [invented](#) at the beginning of the 19th century but are not universally worn around the world.^[3] Women choose to wear a particular style of bra for a variety of reasons. Many believe the bras prevent sagging, but this is not supported by any evidence.

Breast shape^[edit source | editbeta]



Woman wearing a designer demi-cup bra.

Women's bra choices are consciously and unconsciously affected by social perceptions of the ideal female [figure](#) reflecting her [bust](#), waist, and [hip](#) measurement.^[108] The culturally desirable figure for woman in Western culture has changed over time. Fashion historian Jill Fields wrote that the bra "plays a critical part in the history of the twentieth-century American women's clothing, since the shaping of women's breasts is an important component of the changing contours of the fashion silhouette." Bras and breast presentation follow the cycle of fashion.^[108]

Bra fashion[\[edit source\]](#) | [editbeta](#)]

In the United States during the 1920s, the fashion for breasts was to flatten them as typified by the [Flapper era](#). During the 1940s and 1950s, the [sweater girl](#) became fashionable, supported by a *bullet bra* (known also as a torpedo or cone bra) like those worn by [Jane Russell](#) and [Patti Page](#).^[109]

After the feminist [protest](#) during the [Miss America](#) pageant on 7 September 1968, bra manufacturers were concerned that women would stop wearing bras. In response to the feminist era, many bra manufacturers' marketing claimed that wearing their bra was like "not wearing a bra".^[110] During the 1960s, bra designers and manufacturers introduced padded bras and [underwire bras](#). Women's perception of undergarments changed, and in the 1970s, they began to seek more comfortable and natural looking bras.^[109]

Each fall, [Victoria's Secret](#) commissions the creation of a Fantasy Bra containing gems and precious metals. In 2003, it hired the jeweller Mouawad to design a bra containing more than 2,500 carats of diamonds and sapphires, taking over 370 man-hours to complete. German supermodel [Heidi Klum](#) later posed in the bra, which at the time was the world's most valuable, at USD\$10 million.^[12] In 2010, Victoria's Secret hired designer [Damiani](#) to create a US\$2 million Fantasy Bra. It includes more than 3,000 brilliant cut white diamonds, totaling 60[carats](#), and 82 carats of sapphires and topazes.^[111]

Visible bra and straps[\[edit source\]](#) | [editbeta](#)]



[Alyssa Pallett](#) wearing a vest that reveals her bra.

During the 1990s, women in Europe, America and in some parts of Asia began to show their bra- straps, often as a fashion statement.^[112] Until that time,^[113] it was usually considered a [faux pas](#) for women to show their bra or bra straps in public.^[114] In some social circles, that is still true, putting women at risk as being seen as sloppy, slutty,^[115] trashy or immodest.^[116] [Madonna](#) was famously one of the first entertainers to break convention when she wore a cone brassiere as outerwear during her 1990 Blond Ambition tour. (Her brassiere from the tour sold for USD\$52,000 at the Christie's Pop Culture auction in London on November 29, 2012.^[117])

It is increasingly common to see women wearing clothing that purposefully exposes a portion of her bra or bra straps in certain social situations.^[118] For example, Lindsay Lohan was seen showing her bra strips at Charlotte Ronson's fashion show in 2009.^[119] In June 2009, singer [Rihanna](#) wore an orange, lace bra that was visible under a button-down top.^[120] In the television series [Sex and the City](#), [Carrie Bradshaw](#), the character played by [Sarah Jessica Parker](#), wore a top that revealed a lace bra.^[121] [Demi Lovato](#) appeared on [Cosmopolitan's](#) August 2013 cover in a plunging orange dress that reveals the underwire-butressed center of an ornate teal bra. The Fall 2013 Couture collection introduced by [Versace](#) prominently featured fashions that were open in the front, revealing underwire bras.^[122] Singer [Selena Gomez](#) was seen in public wearing bib overalls that exposed the sides of her torso and a black lace bra.^[123]

At the Paris premiere of *L'Ecume Des Jours*, [Audrey Tautou](#) wore a lace [Dolce & Gabbana](#) top that showed off her black bra.^[124] In London, actress [Lucy Mecklenburgh](#), star of [The Only Way Is Essex](#), wore a sheer lace top that clearly showed her black bra underneath.^[125]

While most companies^[126] and especially law firms^[127] have rather conservative dress codes, actress Julia Roberts as the title character frequently wore tops that revealed her Ultimo push-up bra and cleavage in the film [Erin Brockovich](#).^[128] While at a New York City park on May 6, 2013, [Jessica Alba](#) wore a loose-fitting tank top that revealed she was wearing a sheer, black bra, and *Sports Illustrated* swimsuit model [Kate Upton](#) purposefully wore a sheer mini-dress that exposed her bra on a date on July 29, 2013.^[129] David Hacker, vice president of trend and color at [Kohl's](#), believes showing bra straps is acceptable.^[115]

Other women have exposed their bras in public to draw attention and raise funds for charities like breast cancer research.^[130] Wearing clothing that reveals the wearer's bra or bra straps has become so common that *Cosmopolitan* and [Seventeen](#) created guidelines for women describing how to expose their bra straps or bras in an acceptable manner. The guidelines include avoiding flesh-toned, smooth-cup bras, so that the exposure looks deliberate and not accidental. They also recommend making sure the women's bra is in good condition and to wear a style that provides ample coverage.^[131] Other advice includes wearing a flesh-colored bra or a bra that matches the color of the

bra to the color of the sheer garment worn over them^{[132][133]} and don't wear a bra that shows through the garment's armholes.^[134]

Groundbreaking Wonderbra campaign^[edit source | editbeta]



Landmark ad for [Wonderbra](#) featuring Czech model [Eva Herzigova](#).



A Canadian [Wonderbra](#) Model 1300 plunge push-up bra circa 1975.

In May 9, 1994, a significant shift in advertising lingerie occurred. Advertising executive [Trevor Beattie](#), working for [TBWA/London](#), developed an ad for [Sara Lee](#)'s "Hello Boys" [Wonderbra](#) campaign. It featured a close-up image of Czech model [Eva Herzigová](#) in a black [Wonderbra](#) with ample cleavage and the title, "Hello boys."^{[135][136]} The bra was introduced in New York City and Eva's figure wearing the Wonderbra was featured on the large 2,800 square foot billboard in New York's [Times Square](#).^[34] Critics complained that the photograph demeaned women.^[135] The ground-breaking, racy ad campaign was repeated across the United States, resulting in an explosion of sales that Sara Lee could not meet. The Wonderbra began selling at the rate of one every 15 seconds, generating first year sales of about US\$120 million.^[34] Many competitors introduced their own cleavage-enhancing bras.^[34]

John Dixey, former CEO of Playtex, said "the Wonderbra has made it into the [Collin's Dictionary](#). It has become an icon which is just as powerful as [Levi's jeans](#)." By the end of 1994, the Wonderbra had been named one of Fortune's products of the year and was recognized by several other magazines including [Advertising Age](#) and [U.S. News and World Report](#).

The billboard was voted in 2011 as the most iconic outdoor ad during the past five decades by the Outdoor Media Centre.^[137] The influential poster was featured in an exhibition at the [Victoria and Albert Museum](#) in London^[138] and it was voted in at number 10 in a "Poster of the Century" contest.^[139]

The Canada-based lingerie fashion label wanted the ad campaign to motivate women to see the Wonderbra "as a cosmetic and as a beauty enhancer rather than a functional garment".^[137] Unlike prior bras whose purpose was to hide and de-emphasize woman's "unmentionables", the Wonderbra created and enlarged women's cleavage. It marked the shift of the bra from a purely functional garment to a fashion item used "as a means of attraction."^[140]

During 2002, [Wonderbra](#) began sponsoring [National Cleavage Day](#) in [South Africa](#). The event is observed in early April each year.^{[141][142]} Push-up bras got significant attention in 2000 when actress [Julia Roberts](#) in the film [Erin Brockovich](#) enhanced her bust with an Ultimo push-up bra containing liquid silicone gel.^[128]

Miss America protest^[edit source | editbeta]

During the [Miss America](#) contest on 7 September 1968, about 400 women were drawn together from across the United States by a small group, the [New York Radical Women](#), in a [protest](#) outside the event. They symbolically threw a number of feminine products into a large trash can. These included mops, pots and pans, [Cosmopolitan](#) and [Playboy](#) magazines,^[143] false eyelashes, high-heeled shoes, curlers, hairspray, makeup, [girdles](#), [corsets](#), and bras,^[144] items the protestors called "instruments of female torture." [Carol Hanisch](#), one of the protest organizers, said "We had intended to burn it, but the police department, since we were on the boardwalk, wouldn't let us do the burning." A [New York Post](#) story by Lindsay Van Gelder^[145] about the protest drew an analogy between the feminist protest and [Vietnam War](#) protesters who [burned their draft cards](#). In fact, there was no bra burning, nor did anyone take off their bra.^{[146]:4}

Hanisch said, "Up until this time, we hadn't done a lot of actions yet. We were a very small movement. It was kind of a gutsy thing to do. Miss America was this 'American pie' icon. Who would dare criticize this?" Along with tossing the items into the trash can, they marched with signs, passed out pamphlets, and crowned a live sheep, comparing the beauty pageant to livestock competitions at county fairs.^[143] "The media picked up on the bra part," Hanisch said later. "I often say that if they had called us 'girdle burners,' every woman in America would have run to join us."^[143]

Feminist opinions^[edit source | editbeta]

Some feminist writers have considered the bra an example of how women's clothing has shaped and even deformed women's bodies to historically aesthetic ideals, or shaped them to conform to male

expectations. Professor [Lisa Jardine](#) observed feminist [Germaine Greer](#) talking about bras at a formal college dinner:

At the graduates' table, Germaine was explaining that there could be no liberation for women, no matter how highly educated, as long as we were required to cram our breasts into bras constructed like mini-Vesuviuses, two stitched white cantilevered cones which bore no resemblance to the female anatomy. The willingly suffered discomfort of the Sixties bra, she opined vigorously, was a hideous symbol of female oppression.^[147]

Germaine Greer's book *[The Female Eunuch](#)* has been associated with the 'bra burning movement' because she pointed out how restrictive and uncomfortable a bra in that time period could be. "Bras are a ludicrous invention," she wrote, "but if you make bralessness a rule, you're just subjecting yourself to yet another repression."^[148] For some, the bra remains a symbol of restrictions imposed by society on women: "...the classic burning of the bras...represented liberation from the oppression of the male patriarchy, right down to unbinding yourself from the constrictions of your smooth silhouette."^[149] While women didn't literally burn their bras, some women stopped wearing bras as a form of rebellion or protest. By refusing to follow generally accepted norms, they intended to communicate their rejection of how society stratifies men's and women's roles.^[150]

Professor and feminist [Iris Marion Young](#) wrote that in U.S. culture breasts are subject to "Capitalist, patriarchal American media-dominated culture [that] objectifies breasts before such a distancing glance that freezes and masters."^{[108]:31} Some feminists suggest that when a young girl begins wearing a bra, it symbolically changes her breasts into sexual objects.^[3]

Bras and youth[\[edit source\]](#) | [editbeta](#)

Main article: [Training bra](#)

When the [Flapper](#) era ended, the media substituted *teen* for Flapper. Olga manufactured a teen bra that was skimpy and sheer. Other manufacturers responded in kind. Since the end of World War II, a great deal of attention has been given to a girl receiving her first bra. It may be seen as a long-awaited [rite of passage](#) in her life^[3] signifying her [coming of age](#).^{[2][151][2]}

Firm, upright breasts are typical of youth.^[152] As such, they may not physically require the support of a bra. A [Pencil test](#), developed by [Ann Landers](#), has sometimes been promoted as a criterion to determine whether a girl should begin wearing a bra: a pencil is placed under the breast, and if it stays in place by itself, then wearing a bra is recommended; if it falls to the ground, it is not.^{[153][154]}

Girls may choose to begin wearing a [training bra](#) designed for pubescent or teen girls who have begun to develop [breasts](#) during early [puberty](#). They are available in sizes 30AA to 38B.^[155] Training bras are usually designed with a soft, elastic bra band and wireless bra cups. Prior to the marketing of training bras, a pre-teen or young teen girl in Western countries usually wore a one-piece "waist" or [camisole](#) without cups or darts. Bras for pre-teen and girls entering puberty were first marketed during the 1950s.

As a result of a long-term study over 15 years of 330 women aged 18 to 35, Dr. Jean-Denis Rouillon recommended that young girls delay or avoid wearing a brassiere. This will allow a girl's ligaments and skin to strengthen and help support her breasts.^[74] Professor Göran Samsioe of the Department of Obstetrics and Gynecology at the [Lund University](#), Sweden's oldest and largest university, suggested that girls with growing breasts who wear bras can negatively affect the development of elastic tissue beneath the skin that help support breasts. He said these tissues are developed by the "everyday, natural, movements" of the unsupported breasts. "If natural movement is restricted by a bra that is too tight, it can affect the growth of these tissues." He cautioned that girls with unusually large breasts should wear a bra if needed, "as long as it allows your breasts to move in a natural way." He cautioned girls against buying "highly supportive" or constrictive bras, expressing concern that they "are falling prey to societal pressures driven by the commercial interests of clothing manufacturers." He said that girls are made to believe that they need to wear a bra, "but there is no medical reason for them and in some cases it can even be harmful."^[156]

In the early 1960s, 96.3% of female college freshmen bought bras as part of their back to school wardrobe. At the tail end of the 1960s when bralessness increased as a trend, the number had slipped to 85%. Only 77% of high school girls bought bras as they prepared to return to school.^{[25]:151}

Social issues and trends[\[edit source\]](#) | [\[editbeta\]](#)



[Bra fence](#) in New Zealand

Consumers spend around \$16 billion a year worldwide on bras.^[157] In 2012, women in the United States owned an average of 9 bras and wore six of them on a regular basis.^[157] That is an increase from 2006, when the average American woman owned six bras, one of which was a strapless bra, and one in a color other than white.^[158] The average bust size among North American women has increased from 34B in 1983 to a 34DD in 2013.^[159] The growth in bra size is due in part to the availability of a larger selection of bras to choose from and to women wearing better fitting bras.^[159]

Percentage wearing bras[\[edit source\]](#) | [\[editbeta\]](#)

Various surveys have reported that from 75% to 95% of [Western](#) women wear bras.^{[160][12][161][162]} According to underwire manufacturer S & S Industries of New York, who supply bras to [Victoria's Secret](#), [Bali](#), [Warner's](#), [Playtex](#), [Vanity Fair](#) and other bra labels, about 70 percent of bra-wearing women wear [underwire bras](#).^[163]

In a cross-cultural study of bra size and cancer in 9,000 women during the 1960s, a Harvard group found 93% wore bras (from 88% in the UK to 99% in Greece), but could not find enough women in Japan who wore bras to complete their study.^[164] A Harris Survey commissioned by [Playboy](#) asked more than 1,000 women what they like in a bra. Among the respondents, 67% said they like wearing a bra over going braless, while 85% wanted to wear a "shape-enhancing bra that feels like nothing at all." They were split over underwire bras, 49% said they prefer underwire bras while 49% said they prefer wireless bras.^[165]

Social norms [\[edit source\]](#) | [\[editbeta\]](#)

Women sometimes wear bras because they mistakenly believe they prevent [sagging breasts](#).^[62] Others simply feel that bras improve their appearance.^[81] Some wear bras because they believe others might consider their behavior—the unrestrained movement of their breasts or the readily discerned appearance of their nipples under their clothing—as "lewd".^[166] If a woman's nipples or areola can be seen through clothing, others may perceive this as "indecent" or inappropriate.^[58] Some women wear bras because they want to conceal the natural shape of their breasts and nipples, responding to cultural standards of [modesty](#), or because they fear criticism or unwanted attention.^[166] Women's nipples may become erect when stimulated by environmental factors like cold, so women wear bras because they fear that their erect nipples will draw undue or unwanted attention.^[166]

Bralessness [\[edit source\]](#) | [\[editbeta\]](#)

In prior generations, whether a woman wore a [corset](#) reflected on her morality and her social standing. Only women of [ill-repute](#) or [low social standing](#) allowed themselves to be seen not wearing a corset. Wearing a corset became a way for a woman to communicate that she was a worthy female member of polite society.^[167] In the modern world, bralessness is not acceptable in some social or business circumstances,^[168] and some people may judge a woman's social status depending on whether she is wearing a bra or not.^[167]

When a woman chooses to go braless, others may assume she's making a political statement or that she wants sexual attention.^{[58][167]} On the contrary, women who go braless may simply desire to feel more comfortable.^[169] Some women, especially those with smaller busts, prefer to go braless and can get away with it more easily than larger-busted women.^[170] Women may wear bras because their work dress code requires it, but actually prefer going braless.^[166] Some women feel uncomfortable wearing a bra and take off their bras when they return home.^[5]

To avoid unwanted attention, women who want to go braless can choose clothing like camisoles that conceal their breasts and nipples^{[60][171]} or adhesive silicone nipple covers.^[172] Depending on the social context, women may wear different kinds of clothing to hide or reveal the fact that they're not wearing a bra.^[102] Some outer garments like sundresses, tank tops, and formal evening wear are designed to be worn without bras or are designed with built-in support.^[173] In some social circumstances a woman may choose to go braless even when it is obvious to the casual observer.^[174] Unhappy bra owners have donated thousands of bras to the [Braball Sculpture](#), a collection of 18,085 bras.^[175] The organizer, Emily Duffy, wears a 42B and switched to stretch undershirts with built-in bras because standard bras cut into her midsection.^[5]

Braless celebrities[\[edit source\]](#) | [editbeta](#)

Unlike employees of many companies,^[126] celebrities are not subject to dress codes with the exception of rare instances like the [55th Grammy Awards](#),^[176] which a number of celebrities ignored anyway.^[177]

Actress [Marlo Thomas](#) gave up wearing a bra on her television show *[That Girl](#)* in 1968, shortly after the feminist protest during the [Miss America](#) pageant. "God created women to bounce," Thomas said. "So be it."^[37] It is increasingly commonplace to see public figures, especially celebrities, actresses and members of the fashion industry, who have chosen not to wear a bra, at least on some occasions.^[173] British gardening expert and TV personality [Charlie Dimmock](#) hosted her gardening show *[Ground Force](#)* from 1997 through 2005 on BBC. Dimmock, who is large-busted, became well known for going braless at all times in all weather.^[178] Celebrity chef, television personality, and businesswoman [Clarissa Dickson Wright](#) only wears a bra on special occasions.^[12] In 2010, former model and France's first lady [Carla Bruni](#) welcomed Russian president [Dmitry Medvedev](#) at a state dinner in a tight dress that revealed she was braless.^{[179][180]} More recently, singer [Miley Cyrus](#) has been noted for appearing in public on repeated occasions without a bra,^{[181][182]} and even announced via [Twitter](#) that she does not wear a bra.^[183]

Other celebrities noted for going braless on more than one occasion in public include [Britney Spears](#),^[184] [Claire Danes](#),^[185] [Lindsay Lohan](#),^[186] [Nadine Coyle](#),^[187] [Mischa Barton](#),^[188] [Meg Ryan](#),^[189] [Paris Hilton](#),^[190] [Lady Gaga](#),^[191] actress [Tara Reid](#),^{[192][193]} and fashion executive [Tamara Mellon](#).^[194]

Opposition to bras[\[edit source\]](#) | [editbeta](#)

Some people question the medical or social necessity of bras.^[58] Some researchers have found health benefits for going braless. (See [health issues](#) above.) An informal movement advocates breast freedom, [top freedom](#), bra freedom, or simply going braless.^{[195][196][197][198][199]}

Bra opponents believe [training bras](#) are used to indoctrinate girls into thinking about their breasts as sexual objects. In their view, bras for very young girls whose breasts do not yet need support are not functional undergarments and are only intended to accentuate the girl's sexuality. Feminist author Iris

Young wrote that the bra "serves as a barrier to touch" and that a braless woman is "[deobjectified](#)", eliminating the "hard, pointy look that phallic culture posits as the norm." Without a bra, women's breasts are not consistently shaped objects but change as the woman moves, reflecting the natural body. Unbound breasts mock the ideal of the perfect breast. "Most scandalous of all, without a bra, the nipples show. Nipples are indecent. [Cleavage](#) is good—the more, the better..."^[200] [Susan Brownmiller](#) in her book *Femininity* took the position that women without bras shock and anger men because men "implicitly think that they own breasts and that only they should remove bras."^[200]

In October 2009, Somalia's hard-line Islamic group [Al-Shabaab](#) forced women in public to shake their breasts at gunpoint to see if they wore bras, which they called "un-Islamic". They told women that wearing a bra was deceptive and against Islamic teaching.^[201] Girls and women found wearing a bra were publicly whipped because bras are seen as "deceptive" and to violate their interpretation of [Sharia law](#).^{[202][203]} A resident of [Mogadishu](#) whose daughters were whipped said, "The Islamists say a woman's chest should be firm naturally, or flat."^[201]

Individuals opposed to bras in the United States organized a "National No-Bra Day", first observed on 9 July in 2011.^[204] The group encouraged women to go without a bra for the entire day. Women posted on Twitter comments about the relief they feel when taking off their bra. The lingerie firm [Victoria's Secret](#) commented that the day was not good for their business.^{[205][206]} More than 250,000 people expressed support for the special day on a Facebook page dedicated to the event.^[207]

Legal issues[\[edit source\]](#) | [\[editbeta\]](#)

Transportation security[\[edit source\]](#) | [\[editbeta\]](#)

The United States [Transportation Security Administration](#) recommends that women do not wear [underwire bras](#) because they can set off the metal detectors.^[208] In response, Triumph International, a Swiss company, launched what it called a "Frequent Flyer Bra" in late 2001. The bra uses metal-free clasps and underwires made of resin instead of metal that are guaranteed to not set off metal detectors.^[163]

Prison security[\[edit source\]](#) | [\[editbeta\]](#)

In June 2010, attorney Brittney Horstman was prevented from meeting a client at the [Federal Detention Center, Miami](#) when her [underwire bra](#) set off a [metal detector](#). She removed the bra in a bathroom and was then barred from entering the prison because she was now braless, a violation of the detention center's [dress code](#).^[209] The federal [public defender](#)'s office contacted Warden Linda McGrew, who conducted an inquiry. Prison guards had received a memo allowing women wearing underwire bras to enter the prison, but the guards on duty during Horstman's visit were unaware of the modified policy.^[210] The warden concluded the incident was "an aberration" and promised it would not happen again.^[211]

In schools[\[edit source\]](#) | [\[editbeta\]](#)

In November 2009, parents and school officials complained about girls wearing sports bras and boys running shirtless before and after the [Hillsborough County](#) (Tampa area of Florida) Cross Country Championship track event. County athletic director Lanness Robinson informed the athletic directors of all of the Hillsborough County's public schools of a school board policy that even though [sports bras](#) are designed as outer garments, they must be covered with at minimum a [singlet](#) (sleeveless T-shirt) and boys cannot go topless, no matter how hot it is. The policy applies to all events and training sessions.^[212]

Plant High (Tampa) girls cross country coach Roy Harrison reported that out of concern for his student's safety, he would not follow the mandate. "We train all through August and September, when the [heat index](#) is 103 °F (39 °C), 105 °F (41 °C), 107 °F (42 °C) outside even in the evening and to me, it's a safety issue not letting boys run without their shirts and girls in sports bras." Coaches and athletes pointed out that sports bras, form-fitting compression shorts and running shirtless are common, as is wearing [swimsuits](#) and tight-fitting volleyball uniforms.^[212]

During 2012, Memphis, Tennessee Democrat Joe Towns attempted but failed to pass legislation that required female student athletes to wear shirts over their sports bras. Knoxville Republican Bill Dunn was shocked at the way the girls athletes dress.^[213]

...having several children who play sports, it's pretty shocking to me that you go to practices and games and young ladies are walking around in sports bras...would that be considered underwear?

Lawsuits[\[edit source\]](#) | [edit](#)^{beta}]

[Victoria's Secret](#) was sued several times during 2009. The suits alleged that defective underwear contained [formaldehyde](#) that caused severe rashes on women who wore them. Six cases were filed in Ohio and two in Florida. At least 17 other suits were filed in six other states after January 2008.^{[214][215][216]} The plaintiff refused to submit to a simple patch test to determine the precise cause of her reaction and her case was later withdrawn.^[217] The Formaldehyde Council issued a statement that formaldehyde quickly dissipates in air, water and sunlight.^[218]

In employment[\[edit source\]](#) | [edit](#)^{beta}]

In January 2011, a German court ruled that employers can require female employees to wear bras or undershirts at work. An airport security firm argued that requiring bras was essential "to preserve the orderly appearance of employer-provided uniforms." The court also agreed that the company could require employees to keep their hair clean and male employees to be clean shaven or maintain a well-trimmed beard.^[219]

In August 2011, Wendy Anderson of Utah sued her employer for [sexual harassment](#) under Title VII of the [Civil Rights Act of 1964](#). In her suit, she claimed that Derek Wright, her employer, attempted to require her to adhere to a dress code that included a "No Bra Thursday". She alleged that he regularly discussed Anderson's breast size with her in front of other employees.^{[220] [221]}

[Richard Branson](#), the owner of [Virgin Rail](#) in Britain, cause a row among his female train attendants when he introduced new uniforms in May 2013. A number of them complained that the new blouses they are required to wear are too revealing and expose their brassieres to the public. Virgin Rail offered a voucher worth £20 to allow the unhappy employees to purchase a top to wear underneath the new blouses.^[222]

See also[[edit source](#) | [editbeta](#)]

- [Bandeau](#)
- [Brassiere designs](#)
- [Brassiere measurements](#)
- [Bustier](#)
- [Dressed to Kill](#)
- [Gigantomastia](#)
- [History of brassieres](#)
- [La Brassiere](#)
- [Male bra](#)
- [Mammary gland](#)
- [National Cleavage Day](#)
- [Victorian dress reform](#)

Notes[[edit source](#) | [editbeta](#)]

Explanatory notes[[edit source](#) | [editbeta](#)]

1. **Jump up**[^] *Evening Herald* (Syracuse). March 1893. "Still of course the short-waisted gowns mean short-waisted corsets and those ladies who wish to be in the real absolute fashion are adopting for evening wear the six-inch straight boned band or *brassiere* which Sarah Bernhardt made a necessity with her directrice gowns."

Citations[[edit source](#) | [editbeta](#)]

1. [^] **Jump up to:**^{a b c} Wood, K; Cameron, Melainie; Fitzgerald, Kylie (2008). "[Breast Size, Bra Fit and Thoracic Pain in Young Women: A Correlational Study](#)". *Chiropractic & Osteopathy***16**: 1. doi:10.1186/1746-1340-16-1. PMC 2275741. PMID 18339205.
2. [^] **Jump up to:**^{a b c} DeSantis, Violette. "[The First Bra](#)". Retrieved 12 February 2009.
3. [^] **Jump up to:**^{a b c d} Mitchell, Claudia A. (2008). *Girl culture*. Westport, Conn.: Greenwood Press. p. 198. ISBN 9780313339103.
4. **Jump up**[^] Sischo, Lacey, Ph.D. (2008). *Women's experiences with breast augmentation and reconstruction: Bodies, emotions, and the self*. The Florida State University. p. 174. ISBN 9780549949985.
5. [^] **Jump up to:**^{a b c d e} "[Brassiere](#)". Clothing and Fashion Encyclopedia. Retrieved 19 January 2011.

6. ^ Jump up to:^a ^b Apsan, Rebecca (20 October 2006). *The Lingerie Handbook*. Sarah Stark. Workman Publishing Company. p. 186. ISBN 0-7611-4323-8.
7. Jump up^ ["Uplifting Story of the Bra"](#). The Canadian Press. 13 December 2007. Retrieved 14 September 2009.
8. ^ Jump up to:^a ^b Quinion, Michael. ["Brassiere"](#).
9. Jump up^ ["Sarah Burns – Best Friends: The Bra Turns 100"](#). 30 May 2010. [\[dead link\]](#)
10. Jump up^ [US patent 1115674](#), Mary Phelps Jacob, "Backless Brassiere", issued 1914-November-3
11. Jump up^ Duron, Alexandra. ["History of the Bra"](#). *Women's Health*. Retrieved 22 November 2012.
12. ^ Jump up to:^a ^b ^c ^d ^e ["Breast supporting act: a century of the bra"](#). London: The Independent UK. 15 August 2007. Retrieved 11 May 2010.
13. Jump up^ [ἀπόδεσμος](#), Henry George Liddell, Robert Scott, *A Greek-English Lexicon*, on Perseus
14. Jump up^ [στηθοδέσμη](#), Henry George Liddell, Robert Scott, *A Greek-English Lexicon*, on Perseus
15. Jump up^ [μαστόδεσμος](#), Henry George Liddell, Robert Scott, *A Greek-English Lexicon*, on Perseus
16. Jump up^ [μαστόδετον](#), Henry George Liddell, Robert Scott, *A Greek-English Lexicon*, on Perseus
17. Jump up^ Leoty, Ernest; Gautier, Saint Elme (10 September 2010). *Le Corset a Travers Les Ages (1893)* (in French). Kessinger Publishing. p. 120. ISBN 1-167-74666-X. Reprint of the 1893 edition
18. Jump up^ ["The Figure and Corsets. Mataura Ensign \(New Zealand\) November 11, 1887"](#).
19. Jump up^ [Medieval bras discovered at Austrian castle](#). The Guardian. 18 July 2012. Retrieved 18 July 2012.
20. Jump up^ ["600-year-old linen bras found in Austrian castle"](#). 19 July 2012. Retrieved 22 July 2012.
21. Jump up^ Nutz, Beatrix (August 2012). "Medieval lingerie". *BBC History Magazine* (Immediate Media Bristol).
22. Jump up^ siu (2012-07-19). [Büstenhalter aus dem Mittelalter—Der Sonder-Bra](#) (in German). Spiegel online. Retrieved 2012-12-05.

23. **Jump up**[^] Thomas, Pauline Weston (September, 2004). "[Bra History - Bras and Girdles](#)". Fashion-Era.com. Retrieved January 20, 2011.
24. **Jump up**[^] Jenkins, Simon P. R. (July 1, 2005). *[Sports Science Handbook: A-H](#)* (first ed.). Multi-Science Publishing Co. Ltd. p. 400 pages. ISBN 978-0-906522-36-3.
25. [^] **Jump up to:**^{a b c d e} Farrell-Beck, Jane; Gau, Colleen (22 October 2002). *[Uplift: The Bra in America](#)* (illustrated ed.). University of Pennsylvania Press. ISBN 978-0-8122-1835-0. Retrieved 20 January 2011.
26. **Jump up**[^] http://www.youtube.com/watch?v=5_h5-Ov5fm8 *[How to Measure for a Bra](#)*. HerRoom.com. 9 June 2009. Retrieved 19 January 2011.
27. **Jump up**[^] Steele, Valerie (9 November 2010). *[The Berg anion to Fashion](#)*. Berg Publishers. pp. 800 pages. ISBN 978-1-84788-592-0.
28. **Jump up**[^] Mankovitz, Roy (8 January 2009). *[Nature's Detox Plan: A Program For Physical And Emotional Detoxification](#)*. Montecito Wellness LLC. p. 33. ISBN 978-0-9801584-8-9.
29. **Jump up**[^] "[Brassiere \(origin of name\)](#)". Snopes.com Urban Legends. Retrieved 2013-07-26.
30. [^] **Jump up to:**^{a b} Nanas, Edward (February 1964). "[Brassieres: An Engineering Miracle](#)". *Science and Mechanics*. Retrieved 17 April 2010.
31. [^] **Jump up to:**^{a b} Franklin, Deborah (October 1992). "Vanities: Femininity's Seamy Underside". *Health* (San Francisco) **6** (6): 24–30.
32. [^] **Jump up to:**^{a b c d e} "[Bra Finder One Hanes Place Bra Glossary](#)". Hanesbrands Inc. Retrieved 14 November 2011.
33. **Jump up**[^] "[Gale's How Products Are Made: How is a Brassiere Made?](#)". Retrieved 3 February 2011.
34. [^] **Jump up to:**^{a b c d} Moberg, Matthew; Siskin, Jonathan; Stern, Barry; Wu, Ru (1999). "[Sara Lee: Wonderbra](#)". University of Michigan Business School. Retrieved 29 November 2012.
35. **Jump up**[^] "[Charnos takes the plunge with a brand new bra](#)". UK: Aroq Ltd. 25 October 2000. Retrieved 22 April 2009. "The underwired bra accounts for 60 per cent of the market, but women with average or fuller busts must wonder why it is so popular. It is uncomfortable, non-machine washable, and difficult to make, but there has been nothing to replace it"

36. **Jump up** ["Boom in Bras as Women Go Busty". *Daily Record*](#). 12 October 2005. Retrieved 22 April 2009. "Demand for the underwired bra is up by 12 per cent in the last two years and now makes up 70 per cent of the bra market."
37. **Jump up to:** [b](#) Riordan, Teresa (28 October 2002). "[Patents: In bra technology, an incremental improvement can translate into comfort](#)". *The New York Times*. Archived from [the original](#) on 24 April 2009. Retrieved 21 April 2009. "Professor Farrell-Beck said the antecedents for underwire in bras date to at least 1893, when Marie Tucek of New York City patented a *breast supporter*, a sort of early push-up bra made of either metal or cardboard and then covered with fabric."
38. **Jump up** Kehaulani, Sara (10 December 2004). "[Functional Fashion Helps Some Through Airport Checkpoints](#)". *Washington Post*. p. 2. Retrieved 24 April 2009.
39. **Jump up to:** [a](#) [b](#) [c](#) [d](#) [e](#) [f](#) Cope, Samantha (26 April 2013). "[Are you wearing the right bra? We go back to boob school](#)". *Mirror*. Retrieved 30 July 2013.
40. **Jump up** Chen CM, LaBat K, Bye E (April 2010). "Physical characteristics related to bra fit". *Ergonomics* **53** (4): 514–24. doi:10.1080/00140130903490684. PMID 20309747.
41. **Jump up** Abraham, Tamara (2 October 2012). "[They vanity sized it': Modern bra sizes are a scam intended to flatter the wearer, insists top lingerie expert](#)". *DailyMail Online*. Retrieved 8 October 2012.
42. **Jump up** Zheng, Rong; Yu, Winnie; Fan, Jintu (2007). "Development of a new chinese bra sizing system based on breast anthropometric measurements". *International Journal of Industrial Ergonomics* **37** (8): 697–705. doi:10.1016/j.ergon.2007.05.008.
43. **Jump up** "[Bra Size Calculator](#)". *DimensionsGuide.com*. Retrieved 28 April 2010.^{[[dead link](#)]}
44. **Jump up to:** [a](#) [b](#) [c](#) King, Stephanie (2 June 2005). "[A short history of lingerie: Doreen the bra that conquered the world](#)". *The Independent* (UK).
45. **Jump up to:** [a](#) [b](#) "[Figs.com fitting room](#)".
46. **Jump up** "[Bravissimo – The Perfect Fit](#)".
47. **Jump up** "[Bra Style Guide](#)". *AIAboutBras*. Retrieved 22 June 2010.
48. **Jump up** "[Bravado Essential Nursing Bra Tank](#)". Retrieved 6 April 2011.

49. **Jump up**[^] [US Patent Application No. 20070000009](#) Stretchable Nursing Tank Top With Invisible Breast Support
50. [^] **Jump up to:**^{a b} ["Jessica Seigel. Bent out of shape: Why is it so hard to find the perfect bra?"](#). Lifetime Magazine. May/June 2003.
51. **Jump up**[^] Phillips, Jeanne (Van Buren, Abigail) (11 May 2004). ["Dear Abby: Women tired of shouldering burden of bad bra design"](#).
52. **Jump up**[^] McGhee, DE (2006). *How do respiratory state and measurement method affect bra size calculations?* **40**. Steele JR. Sports Medicine. pp. 970–4.
53. **Jump up**[^] ["Right bra 'could halt breast ops' BBC"](#). *BBC News*. 11 April 2008.
54. **Jump up**[^] ["Are you wearing the right bra size?"](#). [\[dead link\]](#)
55. **Jump up**[^] ["Rigby and Peller – Bra fitting"](#).
56. **Jump up**[^] ["Lingerie Bra Fitting Video"](#). Fantasie. Retrieved 28 January 2011.
57. **Jump up**[^] ["Bra fitting tips from the German bra fitting forum www.busenfreundinnen.net"](#). www.busenfreundinnen.net. Retrieved 11 February 2011.
58. [^] **Jump up to:**^{a b c d e} ["Female Intelligence Agency: Why do women wear bras?"](#). 007b Breast. Retrieved 10 May 2011.
59. [^] **Jump up to:**^{a b} ["Female Intelligence Agency: What causes sagging of breasts?"](#). 007b Breast.
60. [^] **Jump up to:**^{a b} Lauersen, Niels H.; Stukane, Eileen (1998). *The Complete Book of Breast Care*(1st Trade Paperback ed.). New York: Fawcett Columbine/Ballantine. [ISBN 978-0-449-91241-6](#).
61. **Jump up**[^] Stuart, Julia (November 2, 2000). ["Don't burn your bra just yet"](#). The Independent. Retrieved 4 February 2012.
62. [^] **Jump up to:**^{a b c d} Cawthorne, Simon (November 2000). ["Bras, the Bare Facts"](#). Channel 4.
63. **Jump up**[^] Perkins, Sharon; Vannais, RN, Carol. ["Debunking Breastfeeding Myths"](#). Dummies.com. Retrieved 31 July 2013.
64. **Jump up**[^] LaFleur, R.N., Elizabeth. ["Are sagging breasts inevitable after breast-feeding?"](#). Mayo Clinic. Retrieved 31 July 2013.
65. [^] **Jump up to:**^{a b} Thompson, Andrea (November 2, 2007). ["Breastfeeding Does Not Make Breasts Sag, Study Suggests"](#). LiveScience.com. Retrieved 2 February 2012.

66. ^ [Jump up to: a b](#) Campolongo, Marianne (December 5, 2007). "[What Causes Sagging Breasts?](#)". Retrieved 26 January 2012.
67. [Jump up](#) *Journal of Aesthetic Surgery* **28** (5): 534–7. Sep – Oct 2008.
68. [Jump up](#) "[Breast Sagging](#)". Retrieved 2 February 2012.
69. [Jump up](#) "[Female Intelligence Agency: Basic breast anatomy](#)". 007b.com. Retrieved 26 April 2010.
70. [Jump up](#) "[Breast Anatomy and Physiology – Breast Health \(Non-Cancerous Breast Issues\)](#)". Imaginis The Women's Health Resource. Retrieved 28 April 2010.
71. ^ [Jump up to: a b](#) Haton, Sandrine. "[Rester naturelle pour votre santé](#)" (in French). Retrieved 5 December 2012.
72. ^ [Jump up to: a b](#) Cascua, Stéphane (June 2009). "[Soutien-Gorge: Ami Des Sportives?](#)" (in French). Sante Sports Magazine. Retrieved 5 December 2012.
73. ^ [Jump up to: a b c](#) "[Le soutien-gorge en question \(The Bra in Question\)](#)" (in French).
74. ^ [Jump up to: a b c d](#) Mislin, Claude. "[Santé Le port du soutien-gorge déconseillé par un médecin bisontin](#)" (in French). Alsace Lepays. Archived from [the original](#) on September 28, 2007. Retrieved 9 May 2013.
75. [Jump up](#) Pierrot, Laetitia (19 December 2003). "Evolution du sein après l'arrêt du port du soutien gorge, étude préliminaire longitudinale sur 33 sportives volontaires, Thèse présentée le". *Thesis presented to the faculty of the Medicine and Pharmacy*(Besançon, France).
76. ^ [Jump up to: a b c d e f g](#) Donnelly, Laura (11 Apr 2013). "[Research suggests bras do no good](#)". Telegraph UK. Retrieved 9 May 2013.
77. [Jump up](#) "[Le port du soutien-gorge déconseillé par un médecin bisontin](#)" (in French). Archived from [the original](#) on October 4, 2008.
78. [Jump up](#) Ashizawa K, Sugane A, Gunji T (June 1990). "Breast form changes resulting from a certain brassière". *Journal of Human Ergology* **19** (1): 53–62. [PMID 2092072](#).
79. [Jump up](#) Ashizawa, K.; Sugane, A.; Gunji, T. (Jun 1990). "Breast form changes resulting from a certain brassière.". *J Hum Ergol (Tokyo)* **19** (1): 53–62. [PMID 2092072](#).
80. ^ [Jump up to: a b c d](#) Mason, BR; Page, Kelly-Ann; Fallon, Keiran (June 1999). "An analysis of movement and discomfort of the female breast

- during exercise and the effects of breast support in three cases". *Journal of Science and Medicine in Sport* **2** (2): 134–44. doi:10.1016/S1440-2440(99)80193-5. PMID 10476977.
81. ^ Jump up to:^{a b c d} Adams, Stephen (13 Nov 2012). "Bad back, neck pain and headaches: the perils of wearing a poorly fitting bra". Retrieved 11 May 2013.
82. **Jump up**[^] Johnston, Rosie (2 December 2008). "Is your bra making you ill?". *The Independent*. Retrieved 20 June 2012.
83. ^ Jump up to:^{a b} McDonald, Sue (2004). "Neck/shoulder/back pain/headaches". Retrieved 5 December 2012.
84. ^ Jump up to:^{a b c d e f g} Greenbaum AR, Heslop T, Morris J, Dunn KW (April 2003). "An investigation of the suitability of bra fit in women referred for reduction mammoplasty". *British Journal of Plastic Surgery* **56** (3): 230–6. doi:10.1016/S0007-1226(03)00122-X. PMID 12859918.
85. **Jump up**[^] Collins, E. Dale; Kerrigan, Carolyn L.; Kim, Myra; Lowery, Julie C.; Striplin, Dana T.; Cunningham, Bruce; Wilkins, Edwin G. (2002). "The Effectiveness of Surgical and Nonsurgical Interventions in Relieving the Symptoms of Macromastia". *Plastic and Reconstructive Surgery* **109** (5): 1556–66. doi:10.1097/00006534-200204150-00011. PMID 11932597.
86. **Jump up**[^] Kerrigan, Carolyn L.; Collins, E. Dale; Striplin, Dana; Kim, H. Myra; Wilkins, Edwin; Cunningham, Bruce; Lowery, Julie (2001). "The Health Burden of Breast Hypertrophy". *Plastic and Reconstructive Surgery* **108** (6): 1591–9. doi:10.1097/00006534-200111000-00024. PMID 11711933.
87. **Jump up**[^] "Breast Development". Massachusetts Hospital for Children. Retrieved 2 June 2010. [[]*dead link*[]]
88. **Jump up**[^] "Asymmetric Breasts". Channel 4. Retrieved 6 February 2010.
89. **Jump up**[^] "Asymmetric Breasts". Retrieved 6 February 2010.
90. **Jump up**[^] Losken A, Fishman I, Denson DD, Moyer HR, Carlson GW (December 2005). "An objective evaluation of breast symmetry and shape differences using 3-dimensional images". *Annals of Plastic Surgery* **55** (6): 571–5. doi:10.1097/01.sap.0000185459.49434.5f. PMID 16327452.

91. **Jump up**[^] Kowalske, Dr. Karen (August 2006). "[Bra Straps Health Watch](#)". Office of News and Publications & the Library at University of Texas Southwestern Medical Center at Dallas.
92. **Jump up**[^] Netscher, David T.; Meade, Ricardo A.; Goodman, Cynthia M.; Brehm, Brenda J.; Friedman, Jeffrey D.; Thornby, John (2000). "Physical and Psychosocial Symptoms among 88 Volunteer Subjects Compared with Patients Seeking Plastic Surgery Procedures to the Breast". *Plastic & Reconstructive Surgery* **105** (7): 2366–73. doi:10.1097/00006534-200006000-00009. PMID 10845288.
93. **Jump up to:**[^] Ryan, Edward L. (2000). "Pectoral Girdle Myalgia in Women: A 5-year Study in a Clinical Setting". *The Clinical Journal of Pain* **16** (4): 298–303. doi:10.1097/00002508-200012000-00004. PMID 11153784.
94. **Jump up to:**[^] Ryan, EL (1987). "Breast-weight and industrial fatigue". *The Medical journal of Australia* **147** (5): 261. PMID 3670180.
95. **Jump up to:**[^] Myint, Oo; Myint, Z; Sakakibara, T; Kasai, Y (2012). "[Relationship between brassiere cup size and shoulder-neck pain in women](#)". *Open Orthopaedics Journal* **6**: 140–2. doi:10.2174/1874325001206010140. PMC 3322448. PMID 22509231.
96. **Jump up**[^] Hitti, Miranda (5 October 2006). "[Back Pain: Women Often Blame Bras](#)". CBS News. WebMD. Retrieved 5 December 2012.
97. **Jump up**[^] "[Neck and shoulder pain are commonly found with chronic muscle strain](#)". NeckSolutions.com. Retrieved 5 December 2012.
98. **Jump up**[^] Ryan, Edward L. (2009). "Pectoral Girdle Myalgia in Women". *The Clinical Journal of Pain* **25** (8): 734–6. doi:10.1097/AJP.0b013e3181af1258. PMID 19920726.
99. **Jump up**[^] "[Breast Pain/Mastodynia](#)". Medisurge Group. Retrieved 30 January 2011.
100. **Jump up to:**[^] Hadi MS (November 2000). "Sports Brassiere: Is It a Solution for Mastalgia?". *The Breast Journal* **6** (6): 407–409. doi:10.1046/j.1524-4741.2000.20018.x. PMID 11348400.
101. **Jump up to:**[^] Krucoff, Carol (9 August 1999). "[Sports Bras Are a Bust for Some](#)". *Los Angeles Times*. Retrieved 11 September 2009.
102. **Jump up to:**[^] Mejia, Lisette. "[Guide to Going Braless](#)". *Women's Health Magazine*. Retrieved 23 November 2012.

103. **Jump up**[^] Ben Johnson; Kathleen Barnes (1 February 2008). *The Secret of Health: Breast Wisdom*. Morgan James Publishing. p. 167. ISBN 978-1-60037-326-8. Retrieved 1 February 2011.
104. **Jump up**[^] Norlock FE (2002). "Benign breast pain in women: a practical approach to evaluation and treatment". *Journal of the American Medical Women's Association* **57** (2): 85–90. PMID 11991427.
105. **Jump up**[^] Tserotas K, Morán Villota C (September 1998). "[Fibrocystic disorders of the breast]". *Ginecología y Obstetricia de México* (in Spanish) **66**: 362–6. PMID 9789408.
106. [^] **Jump up to:**^{a b} Rosolowich V, Saettler E, Szuck B, et al. (January 2006). "Mastalgia". *Journal of Obstetrics and Gynaecology Canada* **28** (1): 49–71; quiz 58–60, 72–4. PMID 16533457.
107. **Jump up**[^] Wilson MC, Sellwood RA (July 1976). "Therapeutic value of a supporting brassière in mastodynia". *British Medical Journal* **2** (6027): 90. doi:10.1136/bmj.2.6027.90. PMC 1687763. PMID 1276824.
108. [^] **Jump up to:**^{a b c} Burns-Ardolino, Wendy (2007). *Jiggle: (Re)Shaping American Women*. Lexington Books. ISBN 978-0-7391-1299-1.
109. [^] **Jump up to:**^{a b} "Bullet Bras". LoveToKnow.com. Retrieved 11 May 2010.
110. **Jump up**[^] Vecchione, Lanajean (2004). "The Bra Advertising Gallery—Bra Ads". Retrieved 13 September 2009.
111. **Jump up**[^] Marsh, Lisa (20 October 2010). "Adriana Lima in Victoria's Secret Fantasy Bra: \$2 Million Dollars, 60 Carats of Diamonds, 1500 Hours". Retrieved 14 December 2010. ^[dead link]
112. **Jump up**[^] "Bra Turns Hundred This Year". Life in Italy. Retrieved 23 August 2013.
113. **Jump up**[^] "Show off our straps". *Chicago Tribune*. 14 August 2003. Retrieved 22 August 2013.
114. **Jump up**[^] "Top fashion faux pas". Retrieved 22 August 2013.
115. [^] **Jump up to:**^{a b} Warren, Ellen (5 August 2010). "Playing peekaboo". Chicago Tribune. Retrieved 22 August 2013.
116. **Jump up**[^] "How to Dress With No Bra". Wikihow. Retrieved 22 August 2013.
117. **Jump up**[^] DelliCarpini Jr., Gregory (3 December 2012). "Madonna's Iconic Cone Bra Sells for \$52,000". Retrieved 21 August 2013.

118. **Jump up** Verner, Amy (6 July 2013). "[Is showing off my bra an acceptable fashion choice?](#)". *The Globe and Mail*. Retrieved 22 August 2013.
119. **Jump up** Ellis, Kori. "[Lindsay Lohan - Lindsay Lohan at Charlotte Ronson Fall 2009](#)". Retrieved 22 August 2013.
120. **Jump up** Zephyr (30 June 2009). "[Would You Wear... a Visible Bra?](#)". Retrieved 21 August 2013.
121. **Jump up** Chelsea (5 August 2010). "[Would You Wear... a Visible Bra?](#)". Retrieved 21 August 2013.
122. **Jump up** O'Connor, Maureen. "[Everyone Is Showing the Centers of Their Bras](#)". *New York Magazine*. Retrieved 21 August 2013.
123. **Jump up** Gruttadaro, Andrew (April 27, 2013). "[Selena Gomez Flaunts Lace Bra Away From Justin Bieber — Love Or Loathe?](#)". *Hollywood LIFe*. Retrieved 22 August 2013.
124. **Jump up** "[Bras Showing Isn't Always A Bad Thing, Audrey Tautou Proves](#)". *Huffington Post*. 04/23/2013. Retrieved 23 August 2013.
125. **Jump up** Anisiobi, J J (30 October 2012). "[TOWIE's Lucy Mecklenburgh shows more is less as she wears a very visible bra with a sheer dress to The Pride of Britain Awards](#) Read more: <http://www.dailymail.co.uk/tvshowbiz/article-2225136/TOWIEs-Lucy-Mecklenburgh-wears-visible-bra-sheer-dress-The-Pride-Britain-Awards.html#ixzz2cocTCblw> Follow us: [@MailOnline on Twitter](#) | [DailyMail on Facebook](#)". *Daily Mail*. Retrieved 23 August 2013.
126. **Jump up to:** ^a ^b "[Work Dress Codes](#)". 27 November 2008. Retrieved 21 August 2013.
127. **Jump up** Remsen, John II (2010). "[Lawyers Should Look Like Lawyers: Part II](#)". The Remsen Group. Retrieved 21 August 2013.
128. **Jump up to:** ^a ^b "[Bras on Top](#)". Retrieved 1 February 2011.
129. **Jump up** "[Kate Upton in see-through mini dress: Stars who wear sheer clothing](#)". *New York Daily News*. 30 July 2013. Retrieved 22 August 2013.
130. **Jump up** "[Bra walkers tackle night marathon](#)". BBC News. 19 June 2005.
131. **Jump up** Cardellino, Carly (25 July 2012). "[How to Show Off Your Bra in Style](#)". *Cosmopolitan*. Retrieved 22 August 2013.
132. **Jump up** "[Top fashion faux pas](#)". Sheknows.com. Retrieved 22 August 2013.

133. **Jump up**[^] McGrath, Kara. "The Dos And Don'ts of Wearing a Bra [url=http://www.seventeen.com/fashion/tips/bra-dos-donts-062008#slide-14](http://www.seventeen.com/fashion/tips/bra-dos-donts-062008#slide-14)". Seventeen. **Missing or empty |url= (help); |accessdate= requires |url= (help)**
134. **Jump up**[^] McGrath, Kara. "The Dos And Don'ts of Wearing a Bra [url=http://www.seventeen.com/fashion/tips/bra-dos-donts-062008#slide-18](http://www.seventeen.com/fashion/tips/bra-dos-donts-062008#slide-18)". Seventeen. **Missing or empty |url= (help); |accessdate= requires |url= (help)**
135. [^] **Jump up to:**^{a b} Gibson, Owen; Stephen Brook (6 May 2005). "[Goodbye boys! Advertising guru quits to form new agency](#)". *The Guardian* (UK). Retrieved 26 April 2010.
136. **Jump up**[^] Salkeld, Luke (5 September 2008). "[Goodbye, boys... Eva Herzigova may have to cover up as the EU pulls the plug on 'sexist' TV commercials](#)". *Daily Mail* (UK). Retrieved 26 April 2010.
137. [^] **Jump up to:**^{a b} "[Eva Herzigova's Wonderbra campaign voted the most iconic ad](#)". *International Business Times*. 5 April 2011. Retrieved 14 November 2011.
138. **Jump up**[^] "[Power of the poster reveals a bigger picture](#)". *The Independent* (UK). 2 March 1998. Archived from [the original](#) on 5 October 2007. Retrieved 22 June 2007.
139. **Jump up**[^] Gibson, Janine (16 October 1999). "[Tory advert rated poster of the century](#)". London: The Guardian Unlimited. Retrieved 22 June 2007.
140. **Jump up**[^] Walsh, John. "[A Social History of the Bra](#)". Retrieved 12 September 2012.
141. **Jump up**[^] [There's a special day just for your cleavage](#) *Independent Online*
142. **Jump up**[^] "[National NO BRA DAY JULY 9 2012](#)". Retrieved 14 September 2012.
143. [^] **Jump up to:**^{a b c} Greenfieldboyce, Nell (5 September 2008). "[Pageant Protest Sparked Bra-Burning Myth](#)". NPR. Retrieved 6 February 2012.
144. **Jump up**[^] Dow, Bonnie J. (Spring 2003). "Feminism, Miss America, and Media Mythology". *Rhetoric & Public Affairs* **6** (1): 127–149. [doi:10.1353/rap.2003.0028](#).

145. **Jump up** Levy, Ariel (August 1985). *Female Chauvinist Pigs: Women and the Rise of Raunch Culture*. Simon & Schuster. [ISBN 0-7432-4989-5](#).
146. **Jump up** Duffett, Judith (October 1968). "WLM vs. Miss America". *Voice of the Women's Liberation Movement*.
147. **Jump up** Merritt, Stephanie (5 October 2003). "[The Observer Profile: Germaine Greer](#)". *The Guardian* (UK).
148. **Jump up** "[German Greer Biography](#)". Retrieved 7 April 2010.
149. **Jump up** Shearer, Violet A. "[Motherhood, Feminism and the Graveyard of Unwearable Bras](#)". Retrieved 7 April 2010.
150. **Jump up** Kornblum, William (2011). *Sociology in a Changing World* (Ninth ed.). Belmont, CA: Wadsworth Cengage Learning. p. 241. [ISBN 978-1111301576](#).
151. **Jump up** Pitts-Taylor, Victoria (2008). *Cultural Encyclopedia of the Body*. Westport, Connecticut: Greenwood Press. p. 43. [ISBN 978-0-313-34146-5](#).
152. **Jump up** Gallant, Ann (1978). *Body treatments and dietetics for the beauty therapist*. Cheltenham, UK: Stanley Thomas Publishers. [ISBN 978-0-85950-401-0](#).
153. **Jump up** West, Richard (June 1975). "[Texas Monthly Reporter: Low Talk](#)". *Texas Monthly*(Emmis Communications): 12. [ISSN 01487736](#). Retrieved 22 February 2011.
154. **Jump up** *Vanity fair* **58**. Condé Nast Publications. January 1995. p. 108. Retrieved 22 February 2011.
155. **Jump up** "[Teen Bras](#)". HerRoom.com. Retrieved 17 November 2011.
156. **Jump up** "[Swedish professor: 'Bras cause saggy breasts'](#)". April 8, 2008. Retrieved 9 May 2013.
157. **Jump up to: a b** "[Victoria's Secrets: 6 Surprising Bra Stats](#)". Redbook Magazine. Retrieved 8 February 2012.
158. **Jump up** Acton, Johnny; Adams, Tania; Packer, Matt (November 2006). *Origin of Everyday Things*. New York: Sterling Publishing Co. p. 38. [ISBN 978-1-4027-4302-3](#).
159. **Jump up to: a b** Graham, Erika. "[The Average American Bra Size Is Now a 34 DD](#)". Racked. Retrieved 30 July 2013.
160. **Jump up** "[Why wear a bra?](#)". Retrieved 2 May 2010.

161. **Jump up** ["Bra Cup Sizes—getting fitted with the right size"](#). 1stbras.com. Retrieved 11 May 2010.
162. **Jump up** ["The Right Bra"](#). Liv.com. Retrieved 11 May 2010.
163. **Jump up to:** [a b](#) Goo, Sara Kehaulani (10 December 2004). ["Functional Fashion Helps Some Through Airport Checkpoints"](#). *Washington Post*. Retrieved 17 September 2009.
164. **Jump up** Hsieh CC, Trichopoulos D (1991). "Breast size, handedness and breast cancer risk". *European Journal of Cancer* **27** (2): 131–5. doi:10.1016/0277-5379(91)90469-T. PMID 1827274.
165. **Jump up** Luciani, Jene (1 December 2009). *The Bra Book: The Fashion Formula to Finding the Perfect*. Ann Deal. BenBella Books. p. 224. ISBN 978-1-933771-94-6.
166. **Jump up to:** [a b c d](#) Sischo, Lacey (2008). ["Women's experiences with breast augmentation and reconstruction: Bodies, emotions, and the self"](#). The Florida State University. pp. 174 pages. ISBN 9780549949985.
167. **Jump up to:** [a b c](#) ["Yes, It's Okay to Go Braless"](#). LingerieAddict. Retrieved 30 July 2013.
168. **Jump up** Null, Gary; Seaman, Barbara; Seaman, Barbara (1999). *For women only! Your Guide to Health Empowerment (Seven Stories Press 1st ed.)*. New York: Seven Stories Press. ISBN 978-1583222782.
169. **Jump up** Brenoff, Ann (July 9, 2012). ["No Bra Day: I Spent My 20s Braless"](#). The Huffington Post. Retrieved 29 November 2012.
170. **Jump up** ["Small Breasts Advantages: This Empty 'Breastseller' Gets It Seriously Wrong"](#). The Huffington Post. 2012-10-22. Retrieved 29 November 2012.
171. **Jump up** Erin Donnelly. ["Trend Test Drive: Going Braless"](#). Lemondrop.
172. **Jump up** Mejia, Lisette. ["Guide to Going Braless"](#). Women's Health Mag. Retrieved 31 July 2013.
173. **Jump up to:** [a b](#) ["A Brief History of Bras"](#). Bras On Top. Retrieved 1 February 2011.
174. **Jump up** ["How to Dress With No Bra"](#). Retrieved 21 August 2013.
175. **Jump up** ["The Braball, Thanks"](#). Emily Duffy.

176. **Jump up** Karmali, Sarah (7 February 2013). "[Grammy Awards Dress Code Tightened](#)". *Vogue*. Retrieved 22 August 2013.
177. **Jump up** Hailey, Jonathan (11 February 2013). "[Celebrity Dress Code Violators At The 2013 Grammy Awards](#)". *CNN*. Retrieved 22 August 2013.
178. **Jump up** Chris Roberts (2006). *Heavy Words Lightly Thrown: The Reason Behind Rhyme*. Thorndike Press. ISBN 0-7862-8517-6.
179. **Jump up** "[Carla Bruni welcomes Russian president to a state dinner in a daringly tight dress](#)". *Daily Mail* (UK). 3 March 2010. Retrieved 26 April 2010.
180. **Jump up** "[BBC Woman's Hour. Going bra-less: Is support essential?](#)". BBC. 15 March 2010.
181. **Jump up** "[Braless Miley Cyrus does a Britney Spears](#)". Sify Movies. 14 October 2010.
182. **Jump up** Krupnick, Ellie (25 January 2012). "[PHOTOS: Miley Cyrus Is A Braless Wonder](#)". *Huffington Post*. Retrieved 26 January 2012.
183. **Jump up** Cyrus, Miley (25 April 2011). "[Miley Ray Cyrus](#)". Retrieved 26 January 2012.
184. **Jump up** "[No bra, price tags on her clothes and messy hair... just another day out for Britney Spears as she hits the shops](#)". *Daily Mail* (UK). 19 March 2010. Retrieved 26 April 2010.
185. **Jump up** "[Le nippleslip de Claire Danes](#)" (in French). Retrieved 26 April 2010.
186. **Jump up** "[Lindsay Lohan exposes her shortage of underwear during revealing shopping spree](#)". *Daily Mail* (UK). 24 October 2009. Retrieved 26 April 2010.
187. **Jump up** "[Braless Nadine Coyle steals the show at Kings of Leon gig \(and it's not bad for her solo career either\)](#)". *Daily Mail* (UK). 24 August 2009. Retrieved 26 April 2010.
188. **Jump up** "[Not a supporting role, then Mischa? Braless Barton heads for new TV show in sheer top](#)". *Daily Mail* (UK). 13 August 2009. Retrieved 26 April 2010.
189. **Jump up** "[Meg Ryan needs a bra](#)". *Celebbitchy*. 26 September 2006. Retrieved 1 February 2011.
190. **Jump up** "[Paris Hilton – Pokies Candid in Beverly Hills](#)". 26 January 2011.

191. **Jump up** Wischhover, Cheryl (6/7/2011). "[The Best Celebrity Nip Slips](#)". Retrieved 28 August 2012.
192. **Jump up** "[Awkward Red Carpet Photos](#)". Retrieved 26 January 2012.
193. **Jump up** Taylor, Blue. "[Tara Reid Braless At Coachella Music Festival 2009](#)". Back Seat Cuddler. Retrieved 26 January 2012.
194. **Jump up** "[Tamara Mellon Nude: Jimmy Choo Owner Poses Topless With Kitten](#)". *Huffington Post*. USA. 04-20-10. Retrieved 26 April 2010.
195. **Jump up** "[Going Braless](#)". GoingBraless.Net. Retrieved 26 April 2010.
196. **Jump up** "[Going Braless](#)". The Breast Site.
197. **Jump up** "[Going Braless... Top shelf dress tips](#)". FocusOnStyle.com. Retrieved 26 April 2010.
198. **Jump up** Raymond, Vanessa. "[How to go Braless](#)". HowToDoThings.com.
199. **Jump up** "[The History of the Bra – History & Info on Bras and Breasts](#)". Feminist Zine. Retrieved 30 January 2011.
200. **Jump up to:** ^a ^b Young, Iris Marion (27 January 2005). *On Female Body Experience: "Throwing Like a Girl" and Other Essays*. USA: Oxford University Press. p. 192. ISBN 978-0-19-516192-2.
201. **Jump up to:** ^a ^b "[Smoothies for a Bra](#)" (in French). Radio-Canada Reuters. 16 October 2009. Retrieved 4 February 2012.
202. **Jump up** "[Whipped for wearing a 'deceptive' bra: Hardline Islamists in Somalia publicly flog women in Sharia crackdown](#)". *Daily Mail* (London). 16 October 2009. Retrieved 12-26-2009.
203. **Jump up** "[Somali Islamists whip women for wearing bras](#)". Reuters. 16 October 2009. Retrieved 04-22-2010.
204. **Jump up** "[July 9, 2012 is the Second Annual 'National No Bra Day'](#)". 9 July 2012. Retrieved 14 September 2012.
205. **Jump up** Ragone, BJ. "[National No Bra Day—Best Hand Bras On Tumblr](#)". Retrieved 14 September 2012.
206. **Jump up** "[No Bra Day: Women Tweet About The Merits Of Not Wearing Lingerie](#)". *Huffington Post*. 9 July 2012. Retrieved 14 September 2012.
207. **Jump up** "[National No Bra Day gains support, boosts spirits](#)". Retrieved 14 September 2012.

208. **Jump up**[^] ["TSA Travel Assistant"](#). Transportation Security Administration. Retrieved 11 May 2011. ^{[[dead link](#)]}
209. **Jump up**[^] ["Lawyer of the Day: Brittney B. Horstman Is Above the Bra"](#). Federal Detention Center, Miami. Retrieved 31 July 2013.
210. **Jump up**[^] Hill, Kashmir (14 June 2010). ["Lawyer of the Day: Brittney B. Horstman Is Above the Bra"](#). Retrieved 31 July 2013.
211. **Jump up**[^] Jay Weaver (June 12, 2010). ["Wrong bra, no bra: Jail bars lawyer"](#). [Miami Herald](#). Retrieved July 14, 2010.
212. [^] **Jump up to:**^{a b} Ward, Bill (5 November 2009). ["Student athletes may feel heat of dress codes"](#). Tampa Tribune, Florida. Retrieved 3 October 2010. ^{[[dead link](#)]}
213. **Jump up**[^] ["Lawmaker Wants Female Student Athletes to Wear Shirts Over Bras"](#). WPLN News. Retrieved 21 August 2013 date= 14 March 2012.
214. **Jump up**[^] ["Toxic Bras Update: Suits Won't Be Combined in Ohio"](#). onpoint.com. 21 June 2009. Retrieved 3 October 2010.
215. **Jump up**[^] ["Victoria's Secret Bras May Contain Formaldehyde, Cause Blisters"](#). New York Magazine. 11 November 2008.
216. **Jump up**[^] Andrea Canning. ["Victoria's Secret: Formaldehyde in Bras?"](#). Jen Pereira, Mariecar Frias and Imaeyen Ibang. Good Morning America.
217. **Jump up**[^] ["Victoria's real secrets: A brand that needs a walk-in closet for its skeletons Date=3 April 2010"](#). Retrieved 15 January 2011.
218. **Jump up**[^] ["Victoria's Secret: Formaldehyde in Bras?"](#). ABC News. 11 November 2008.
219. **Jump up**[^] ["Court orders women to wear bras and keep fingernails short at work"](#). News.com.au. 13 January 2011. Retrieved 19 January 2011.
220. **Jump up**[^] Melinda, Rogers (August 5, 2011). ["Woman claims employer subjected her to 'Mini-skirt Monday'"](#). *The Salt Lake Tribune*. Retrieved 31 July 2013.
221. **Jump up**[^] ["TRUDY NYCOLE ANDERSON vs. LONE PEAK CONTROLS, INC."](#). HOWARD, LEWIS & PETERSEN, P.C. August 4, 2011. Retrieved 31 July 2013.
222. **Jump up**[^] ["Bra wars: Virgin Trains in row over see-through uniforms"](#). AOL Travel UK. 8 May 2013. Retrieved 22 August 2013.

Books[\[edit source\]](#) | [edit](#)_{beta}]

- Yu W, Fan JT, Ng SP, Harlock SC (2006). *Innovation and technology of women's intimate apparel*. Boca Raton: CRC Press. [ISBN 978-0-8493-9105-7](#). [OCLC 71139537](#).
- Ewing, Elizabeth (1971). *Fashion in underwear*. London: Batsford. [ISBN 0-7134-0857-X](#).
- Gau, Colleen; Farrell-Beck, Jane (2002). *Uplift: the Bra in America*. Philadelphia: University of Pennsylvania Press. [ISBN 0-8122-3643-2](#). (for reviews, see next [section](#))
- Greer, Germaine (2001). *The female eunuch*. New York: Farrar, Straus and Giroux. [ISBN 0-374-52762-8](#).
- Lindsey, Karen; Love, Susan M. (2000). *Dr. Susan Love's breast book* (3rd ed.). Cambridge, Mass: Perseus Publishing. [ISBN 0-7382-0235-5](#).
- Pedersen, Stephanie (2004). *Bra: a thousand years of style, support and seduction*. Newton Abbot: David & Charles. [ISBN 0-7153-2067-X](#).
- Steele, Valerie (2001). *The corset: a cultural history*. New Haven, Conn: Yale University Press. [ISBN 0-300-09953-3](#).
- Stoppard, Miriam (1996). *The Breast Book*. New York: DK Pub. [ISBN 0-7894-0420-6](#).
- Leigh Summers (2001). *Bound to please: a history of the Victorian corset*. Oxford: Berg. [ISBN 1-85973-510-X](#).
- Warner LC (1948). *Always starting things*. Bridgeport, Connecticut: Warner Brothers.

Book reviews[\[edit source\]](#) | [edit](#)_{beta}]

- Fischer, Gayle V; Farrell-Beck, Jane; Gau, Colleen (2003). "Uplift: The Bra in America". *Journal of American History* **89** (4): 1539–40. [doi:10.2307/3092606](#). [JSTOR 3092606](#).
- Murphy, Michael (2003). "Book Reviews". *Winterthur Portfolio* **38** (2/3): 151–9. [doi:10.1086/421426](#).

Articles[\[edit source\]](#) | [edit](#)_{beta}]

- [BBC News](#) (10 December 2007). ["'Intelligent bra' battles bounce"](#).
- Casselman A (22 November 2005). ["The physics of bras"](#). *Discover*.

- Freeman SK (2004). "[In Style: Femininity and Fashion since the Victorian Era](#)". *Journal of Women's History* **16** (4): 191–206. doi:10.1353/jowh.2004.0081.
- Lovel K, Seastrunk C, Clapp T (9 January 2006). "[The Application of TRIZ to Technology Forecasting. A Case Study: Brassiere Strap Technology](#)" (PDF). *The TRIZ Journal*.
- Seigel, Jessica (13 February 2004). "[The Cups Runneth Over](#)". *The New York Times*.
- Steele, Valerie (Spring 1998). "[Le Corset: A Material Culture Analysis of a Deluxe French Book](#)". *The Yale Journal of Criticism* **11** (1): 29–3. doi:10.1353/yale.1998.0023.
- Iken, Katja (5 July 2012). "[100 Jahre BH-Revolution](#)".

Documentaries [\[edit source\]](#) | [\[editbeta\]](#)

- "Bras: The Bare Facts". *Dispatches*. Series 14. Episode 16 or 17. 2 November 2000. [Channel 4](#) (UK).

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