A navel concealment device is provided. The device has an adhesive substrate, a disc, an interfacing layer, and release sheets wherein the adhesive forces of the substrate counteract the force of the protruding navel, holding the navel flush with the abdomen. The concealment device may be antimicrobial, padded, moisturizing, concave, convex, flat, flushable, textured, scented, perfumed, hypo-allergenic, powdered, stretchable, porous, or a combination of any of these aspects. The device may also incorporate a speaker to soothe the fetus during pregnancy.
NAVEL CONCEALMENT DEVICE

FIELD OF THE INVENTION

[0001] The present invention relates generally to concealment of bodily protrusions. In particular, the present invention is directed toward a method and apparatus for concealing a navel or other undesirable bodily protrusion.

BACKGROUND OF THE INVENTION

[0002] During pregnancy, the outer wall of a woman's abdomen is under considerable pressure, especially during the last trimester. This pressure is asymmetrically applied throughout the woman's abdomen by her normal, routine movement. Furthermore, the force of gravity creates a downward pull on the abdomen. In many cases, the forces generated by pressure and gravity can cause the navel to protrude. Such protrusions can extend to over two inches from the surface of the woman's abdomen.

[0003] These protrusions, typically referred to as "outies," can also be found on women who are not pregnant, and on men. In these cases, the protrusion may be medically corrected through a procedure called an umbilicoplasty. For the sake of brevity, the following discussion is couched primarily in terms of navel protrusions in pregnant women but it should be understood that the invention has application to all other occurrences of navel protrusions.

[0004] Pregnant women with protruding navels may become self-conscious when they are in public, and may view their protruding navels as undesirable, unattractive, or unattractive. This concern may be heightened in situations such as work, church, and other social functions. Furthermore, given the recent trend in maternity clothing from over-sized, free-flowing garments to sleek, form-fitting attire, some pregnant women have an increased need to conceal their protruding navels.

[0005] The prior art regarding the concealment of bodily protrusions has mainly been directed toward nipples, whether erect or flaccid. Numerous solutions have been proposed to address the "tenting" of garments covering such nipples, namely padded concealment, supporting concealment, and adhesive-edged constriction. These approaches are often found in combination in individual devices. Band-Aids®, Nippits®, and Breast Petals®, are three commonly used devices to conceal nipples. While these devices may or may not adequately address their desired application to nipples, they all fail to effectively address the concealment of protruding navels. Specifically, such devices do not generate enough force to depress a protruding navel flush with the abdomen, and often will not stay in place during exercise, nor are the existing devices large enough to cover protruding navels. Furthermore, the adhesive forces (or tackiness) of the existing devices is insufficient to stay in place. The present invention effectively addresses these problems and is directed toward a method and apparatus for concealing protruding navels.

SUMMARY OF THE INVENTION

[0006] The present disclosure is directed to a method and apparatus for concealing protruding navels. This is accomplished by providing an adhesive substrate upon which a substantially circular or elliptical disc is placed. To maintain sterility and to provide additional comfort, gauze or a thin layer of padding of the type customarily found in Band-Aid® bandages, is placed over the disc and attached to the adhesive substrate, acting as an interface between the disc and the protruding navel. The padding may contain multiple layers such that the surface that comes into contact with the navel is lubricated, medicated, or otherwise possesses a low coefficient of friction. Alternatively, the disc may be uncovered. Furthermore, instead of a disc, a thick, dense layer of gauze or padding may be used.

[0007] The adhesive substrate is dimensioned to ensure that the outward force applied by the protruding navel is counteracted by the adhesive force of the substrate, and can be accomplished by a wide range of shapes, including rectangular, circular, elliptical, and oblong. If rectangular, the adhesive substrate should have rounded corners and should be no larger than three (3) by six (6) inches. The adhesive substrate may or may not have reinforcement such as nylon threads. Furthermore, the adhesive substrate should have sufficient surface area and adherent forces in order to depress a protruding navel flush to the abdomen, and should maintain its adhesiveness when exposed to moisture due to sweating, showering, or swimming.

[0008] The substantially circular or elliptical disc can be made of plastic, such as high density polyethylene (HDPE) or polyethylene terephthalate, and any other material that provides a substantially rigid, yet flexible surface on which to depress the navel flush with the abdomen. The disc may be concave, convex or flat. The diameter of the substantially circular disc can range from 0.9 to 1.5 inches (22.86 mm to 38.1 mm). The length of the major axis of the substantially elliptical disc can range from 0.9 to 2.0 inches (22.86 mm to 50.8 mm). In the preferred embodiment, the disc is substantially flat and about the size of a U.S. Quarter and made from HDPE. If a disc is not used, a thick, dense gauze of the type used in bandages may be used and could possess the same dimensions and characteristics of those described above.

[0009] The present invention may also include artistic designs or textures on the outer surface of the adhesive substrate to appeal to women who may be exposing their abdomens. Furthermore, fragrances, lotions, powders, or moisturizers may be incorporated into the gauze or padding in order to improve the invention's aesthetic value. The device may have a speaker embedded or attached to it for soothing the fetus, it may be provided in a variety of different colors, it may be elastic, antimicrobial, hypoallergenic, non-latex, porous, biodegradable, or flushable.

[0010] For purposes of summarizing the invention, certain aspects, advantages, and novel features of the invention have been described herein. It is to be understood that not necessarily all such advantages may be achieved in accordance with any one particular embodiment of the invention. Thus, the invention may be embodied or carried out in a manner that achieves or optimizes one advantage or group of advantages as taught herein without necessarily achieving other advantages as may be taught or suggested herein.

[0011] These and other embodiments of the present invention will also become readily apparent to those skilled in the art from the following detailed description of the embodiments having reference to the attached figures, the invention not being limited to any particular embodiment(s) disclosed.
BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The present invention is described with reference to the accompanying drawings. In the drawings, like reference numbers indicate identical or functionally similar elements. Additionally, the left-most digit(s) of a reference number identifies the drawing in which the reference number first appears.

[0013] FIG. 1 is an exemplary navel concealment device;

[0014] FIG. 2 is perspective view of an exemplary concealment device showing the elements of the device;

[0015] FIG. 3 shows alternate shapes of the navel concealment device.

DETAILED DESCRIPTION

[0016] The various embodiments of the present invention and their advantages are best understood by referring to FIGS. 1 through 3 of the drawings. The elements of the drawings are not necessarily to scale, emphasis instead being placed upon clearly illustrating the principles of the invention. Throughout the drawings, like numerals are used for like and corresponding parts of the various drawings.

[0017] Referring now to FIG. 1, a thin adhesive substrate 105 is shaped and dimensioned to ensure that the outward force applied by the protruding navel is counteracted by the adhesive force of the substrate. In one embodiment, the adhesive substrate is a Steri-Strip® in a substantially rectangular shape, two (2) inches wide by five (5) inches long. The adhesive substrate may be provided in a wide range of shapes, including rectangular, circular, elliptical, and oblong. In the preferred embodiment, the adhesive substrate should have rounded corners and should be no larger than three (3) by six (6) inches.

[0018] A substantially circular or elliptical disc 110 is attached to the adhesive substrate 105 at about the middle of the substrate. If circular, the diameter of the disc 110 can range from 0.9 to 1.5 inches (22.86 mm to 38.1 mm). If elliptical, the length of the major axis can range from 0.9 to 2.0 inches (22.86 mm to 50.8 mm). In the preferred embodiment, the size of the disc is 24.26 millimeters (0.955 inch), about the size of a U.S. quarter. The disc can be made of plastic, such as high density polyethylene (HDPE) or polyethylene terephthalate, and any other material that provides a substantially rigid, yet flexible surface on which to depress the navel flush with the abdomen. In the preferred embodiment, the disc is made of HDPE. However, in lieu of a disc, an area of thick, dense gauze or padding may be used to suppress the protruding navel.

[0019] The disc 110 is placed substantially in the middle of the substrate 105, but may be placed lower along the vertical axis in other embodiments. Such embodiments recognize that the protruding navel creates increased downward force during exercise, necessitating the need for a greater counterforce above the navel.

[0020] As shown on FIG. 2, the disc 110 is sandwiched between the adhesive substrate 105 and an interfacing layer 115. The interfacing layer 115 maintains sterility and provides additional comfort to the wearer. In the preferred embodiment, the interfacing layer is made of gauze; however, other embodiments may employ a thin layer of padding, or a multilayered pad where the surface that comes into contact with the navel is lubricated, medicated, or otherwise possesses a low coefficient of friction. Finally, release sheets 205 cover and protect the adhesive and the interfacing layer and allow for easy handling and application to the abdomen.

[0021] FIG. 3 shows alternative embodiments of the present invention, and specifically different shapes which may be employed to fully depress the navel flush with the abdomen.

[0022] This invention may be provided in other specific forms and embodiments without departing from the essential characteristics as described herein. The embodiments described above are to be considered in all aspects as illustrative only and not restrictive in any manner. The following claims rather than the foregoing description indicate the scope of the invention.

[0023] As described above and shown in the associated drawings, the present invention comprises a navel concealment device. While particular embodiments of the invention have been described, it will be understood, however, that the invention is not limited thereto, since modifications may be made by those skilled in the art, particularly in light of the foregoing teachings. It is, therefore, contemplated by the appended claims to cover any such modifications that incorporate those features or those improvements that embody the spirit and scope of the present invention.

What is claimed is:

1. A navel concealment device comprising:
   a. a substrate with an adhesive layer on one side thereof;
   b. a disc affixed to said substrate by the adhesive layer of said substrate;
   c. an interfacing layer of gauze dimensioned to completely cover said disc and affixed to said substrate by the adhesive layer of said substrate; and
   d. release sheets;

wherein said interfacing layer is placed between said disc and a protruding navel or other bodily protrusion, and said adhesive layer is affixed to an area surrounding said protruding navel such that said protruding navel is depressed.

2. The navel concealment device of claim 1 wherein said substrate is substantially rectangular with substantially rounded corners.

3. The navel concealment device of claim 2 wherein the length of said substrate is from about four (4) to about seven (7) inches, and the width of said substrate is from about two (2) to about four (4) inches.

4. The navel concealment device of claim 1 wherein said disc is substantially circular.

5. The navel concealment device of claim 4 wherein the diameter of said circular disc is between about 0.9 to about 1.5 inches.

6. The navel concealment device of claim 1 wherein said disc is substantially elliptical.

7. The navel concealment device of claim 7 wherein the major axis of said elliptical disc is from about 0.9 to 2.0 inches.

8. The navel concealment device of claim 1 further comprising a moisturizing layer between said release sheets and said interfacing layer made of a moisturizing material.
9. The navel concealment device of claim 1 further comprising a medicated layer between said release sheet and said interfacing layer.

10. The navel concealment device of claim 1 further comprising a powder wherein said powder is placed between said interfacing layer and said release sheets.

11. The navel concealment device of claim 1 wherein said substrate is reinforced with nylon threads.

12. The navel concealment device of claim 1 wherein said substrate and interfacing layer is made of an antimicrobial material.

13. The navel concealment device of claim 1 wherein said substrate and interfacing layer is made of a hypoallergenic material.

14. A navel concealment device comprising:
   a. a substrate with an adhesive layer on one side thereof;
   b. a dense, padding layer affixed to said substrate by the adhesive layer of said substrate; and
   c. release sheets;

wherein said padding layer is placed between said substrate and a protruding navel or other bodily protrusion, and said adhesive layer is affixed to an area surrounding said protruding navel such that said protruding navel is depressed.

15. The navel concealment device of claim 14 wherein said substrate is substantially rectangular with substantially rounded corners.

16. The navel concealment device of claim 15 wherein the length of said substrate is from about four (4) to about seven (7) inches, and the width of said substrate is from about two (2) to about four (4) inches.

17. The navel concealment device of claim 14 further comprises a moisturizing layer between said release sheets and said padding layer wherein said moisturizing layer is made of a moisturizing material.

18. The navel concealment device of claim 14 further comprising a medicated layer between said release sheets and said padding layer.

19. The navel concealment device of claim 14 further comprising a powder wherein said powder is placed between said padding layer and said release sheets.

20. The navel concealment device of claim 14 wherein said substrate is reinforced with nylon threads.

21. The navel concealment device of claim 14 wherein said substrate and padding layer is made of an antimicrobial material.

22. The navel concealment device of claim 14 wherein said substrate and padding layer is made of a hypoallergenic material.

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