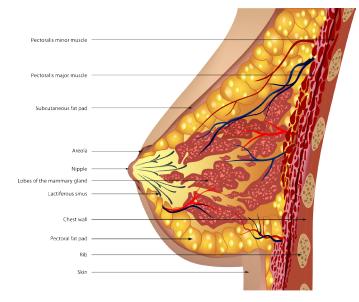
BREAST COMPRESSION SUPPORT AND **BOOBAND**™

Booband is a new wearable band for women who want additional support and comfort when exercising. It can be worn across the top of the breasts and either over or under a sports bra or in fact any regular bra.

The compression provided by Booband can prevent excess movement, which leads to ligament damage and skin stretching, and can improve comfort during running or other forms of exercise.

WHY MIGHT WE GET SAGGY BREASTS?

Breasts are actually quite complicated and need looking after. The connective tissues in the breasts are called Cooper's ligaments. They help maintain structural integrity, but they are thin bands and are not that strong. The ligaments connect the breast tissue to the lower layer of skin of the breast. They play a role in supporting the breast in its normal position, and maintaining its normal shape. Without the internal support of this ligament, the heavy breast tissue sags, losing its shape and contour. The skin is also a major support structure for the breast. Unfortunately sagging is partly determined by our genes, age, pregnancy, smoking and weight.



BOUNCING WHEN RUNNING

Breasts can move as much during a jog as they do during a sprint. Movement when running can result in temporary pain and discomfort. It can also lead to a more permanent stretching of the Cooper's ligament, and puts more strain on the surrounding skin, which may lead to irreversible breast sag. An ordinary bra can reduce bounce but not as much as a sports bra. Booband, along with a supportive sports bra can help prevent the skin and ligaments from stretching.

Running can put excessive tension on the chest muscles, and Cooper's ligaments that help suspend the breasts.

These ligaments have been found to extend or "creep" during a short run. This uncontrolled movement puts great strain on the surrounding tissues and ligaments. The skin is also an important support mechanism, and thinning and decreased elasticity of the skin is an important factor in sagging with age.

WHAT'S THE EVIDENCE?

Some women are concerned that running might cause saggy breasts. There haven't been studies showing the effect of Booband on sagging, but there is good research on "breast kinematics" which has looked at exercise-related breast pain (mastalgia) and bra design. Running causes the breast to move in a figure of eight motion (up-down, side-side, front-back). Pain comes from the breasts moving out of sync with the rest of the body. Breast size makes a difference, bigger boobs move more. Portsmouth University Department of Sport and Exercise Science has conducted relevant work into breast health. Their researchers said that many women could be irreversibly damaging their breasts through inadequate breast support, which affects a female's running kinetics, and may have negative physiological consequences on sports performance.

HOW DOES BOOBAND HELP?

Booband helps prevent excessive movement, and therefore supports breast health – especially as breast size increases. It does so by adding more compression to the top of the breasts. Booband can be used in addition to a well-fitted sports bra to add a support, not all sports bras will completely prevent bounce. Remember, it's much better to do everything you can to stay healthy to prevent sagging because it's sadly irreversible.

Sources of relevant data

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- Haake, S., Milligan, A., & Scurr, J. (2012). Can measures of strain and acceleration be used to predict breast discomfort during running? Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 227(3), 209-216.
- 3. Milligan, A., Mills, C., & Scurr, J. (2014). The effect of breast support on upper body muscle activity during 5km treadmill running. Human Movement Science, 38, 74-83.
- 4. Risius, D., Milligan, A., Mills, C., & Scurr, J. (2014). Multiplanar breast kinematics during different exercise modalities. European Journal of Sport Science, (ahead-of-print), 1-7.
- 5. Wood, L. E., White, J., Milligan, A., Ayres, B., Hedger, W., & Scurr, J. (2012). Predictors of three-dimensional breast kinematics during bare-breasted running. Medicine and Science in Sports and Exercise, 44(7), 1351-1357.

Information collated from various public resources.

