

## **6. Conclusions**

Amongst this group of individuals who have, or are at a high risk of having BRCA mutations, there is a strong perception that their risk of developing breast cancer is dominated by their genetic predisposition. The group believe that there may be other factors which they consider may be possible influences upon their risk, the exact nature of these possible factors varies widely across the group and includes elements such as diet, exercise, stress, and environmental toxins. The vast majority of individuals taking part in this study have attended the breast cancer family history clinic and also have a very high cancer burden, it is likely that this direct experience of breast cancer has a strong influence on their perception of their risk level and reinforces their belief that their risk of breast cancer is significantly different to that of the general population. This can lead to a fatalistic view of their breast cancer risk and cause the individual to begin to look at ways to cope with the situation as much as at ways to reduce risk.

Despite this perception that risk of breast cancer is dominated by genetic factors most of the group display a clear motivation to engage in behaviours which they believe will be beneficial to their health. These benefits are seen to be related to both improvement in overall health and also to improving their body's ability to deal with cancer should it occur. There is also an underlying belief that some of the causes and triggers for breast cancer are not fully understood and that by following what they perceive as a healthy lifestyle they may reduce their exposure to these possible risks. Although the perception of what constitutes a healthy diet varies within the group, most participants report either already following a 'healthy lifestyle' or having made behavioural changes to do so.

Amongst this group, reporting engagement in healthy lifestyle behaviours does not necessarily correlate with having stated that these are breast cancer risk factors. Although this may suggest that motivations for health behaviour changes amongst this population are complex, the fact that most of the group make behaviour changes despite believing that these may not have a large impact on their risk of developing breast cancer, indicates that if a direct link between specific behaviour and reduction in breast cancer occurrence can be proven and can be communicated in a clear and consistent manner through those the group see as experts, then this may become a focus for the strong desire the group show to find ways to control their risk level.

The individuals involved in this study were generally willing to participate in a possible future trial to investigate the effectiveness of diet and exercise based treatments. There was little evidence that the motivation for this willingness was consideration of body image, rather the motivation was reported to be a desire to help researchers develop further understanding in this area and the belief that this would benefit others in the future. The group were generally wary of drug based trials.