

## *A big "Hello" from the SWS team*

Since the SWS began in 1998, 12,500 women have taken part and been interviewed by one of our research nurses. We are most grateful to you all. 2,500 of you have since been followed through a pregnancy by our staff at the Princess Anne Maternity Hospital. We are still recruiting pregnant women, **so if you become pregnant, and have not already delivered a baby in the SWS we would very much like to hear from you even if you were interviewed some years ago**; please phone our freephone number **0800 783 4503**. Many thanks.

**What's in this Newsletter:** We are very grateful to you for helping us in this survey. This newsletter is to tell you what we are doing now and to give you some of the results that we have found from looking at the information you have kindly given us. We hope you find it interesting.

**Progress:** We are busy following up the 2,500 SWS babies and so far we have seen 2,200 of them at 6 months of age, 1,900 at 1 year, 1,300 at 2 years and 750 at age 3 years. We are also studying some children at 4 years and currently are developing plans to see many of them when they are 6 years old.

**Food choice:** Do you remember all those questions about how often you ate various different foods? We have looked at the choices you all make in the types of food you eat, and found out what influences these choices. Our research team has found that women who have children in the household are less likely to eat plenty of fruit and vegetables, and that women who have spent longer in education are more likely to follow the healthy eating recommendations and not eat too much fat. The findings show huge variations in the balance of different foods eaten by women today – the information you have given will allow us to identify new ways to improve health and wellbeing.



*The pictures alongside are of fridges of women who participated in the SWS. They show the wide variety of foods eaten by women, and what they keep in their fridges. Magda Segal, a freelance photographer, spent a day with some SWS women and took these photographs and those overleaf.*

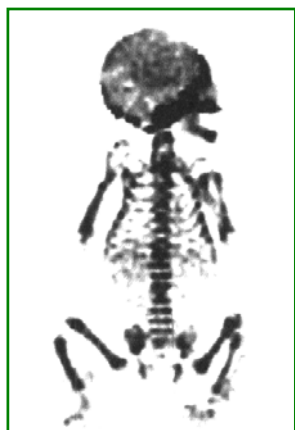


**Lung function in early life:** 150 babies took part in a special aspect of the study to look at lung development. Between the ages of 5 and 14 weeks the babies came to Southampton General Hospital where their lungs were assessed. We found that babies who were smaller at birth, or who had grown very fast in the first few weeks of life tended to have narrower airways in the lungs. We believe that the way in which a baby develops in the womb is what determines this and we now want to look at the pregnancy scan measurements to see if we can work out what growth patterns are best for the baby's lung development. We also want to see these and other children at 6 years of age to see how their early lung function relates to their health in childhood. Narrow or stiff airways make an infant more likely to wheeze if they have a chest infection and this may lead on to childhood asthma.

**Bone Growth:** During pregnancy, growth of the baby's bones needs some of the calcium from the mother's own skeleton; as babies' bone growth may affect their risk of weak bones and bone fractures later in life, we are studying the bones of the mother and her baby.

During pregnancy, SWS women have two heel scans that show how their bone changes during pregnancy. Some of the babies have a bone density scan within a few weeks of birth and we have recently started repeating these bone scans on some of the children who have reached 4 years of age. These babies' fathers are also asked to have a bone scan, which will provide information about the role the father has in determining the baby's bone growth.

Findings so far have shown that women who drink less milk and those who are pregnant in the winter months tend to lose more bone in pregnancy. This may be explained by calcium in the milk and the vitamin D derived from exposure to the sun.



Baby bone scan

**Pre-menstrual syndrome (PMS)**

About 1,000 of you kindly completed a six-week diary of your menstrual symptoms for us. We have analysed these and found that women who are taking oral contraceptives or Depot seem to be less likely to suffer from PMS (sometimes known as PMT). Also, there is a suggestion that women who are overweight, who have a lot of stress in their lives or who smoke are more likely to suffer from PMS. We have a GP working with us on this study and she would like to do more research in this area to see if giving hormonal contraceptives to women with PMS actually helps their symptoms.



**Protein metabolism**

Some of the SWS women have been helping us to find out more about how a woman's body uses the protein in her diet (protein metabolism). We have previously found that the *greater* the protein metabolism in pregnancy, the *longer* the baby.

Something that has never been done before is to measure a woman's protein metabolism *before* and during pregnancy, to investigate what affects her protein metabolism. For example, we know that height and weight affects it, but what about other factors such as how fat or muscular she is, or the food that she eats?

As time goes by, we will update our website with information about progress with the study and what we have found. Do look at it, if you can. The address is [www.swsurvey.soton.ac.uk](http://www.swsurvey.soton.ac.uk)

Local Research Ethics Committee number 390/02/w

**Thank you once again for your contribution to the SWS, we are very grateful**

