



# Using m-learning Objects in Healthcare

“The SOMAH app”



eQUITY

## The SOMAH app


### 1. Introduction

SOMAH is an acronym for Samtaler Om MAT på Helsestasjonen, which translates to “conversations about food at mother and child health clinics”. It is designed in collaboration with public health nurses and midwives in response to an increase in gestational diabetes and diabetes type 2 in the Norwegian population as a whole, and in marginalised groups in particular. The community midwives were searching for a communication tool which would help them give nutritional advice to pregnant women, focussing on dietary challenges and necessary changes in preventing gestational diabetes. While the public health nurses were in need of a similar communication tool to use in nutritional guidance with parents of overweight children, to encourage healthy dietary choices for the whole family.

The prevalence of obesity has increased in Norway, both among adults and children. These trends have caused changes in disease patterns, including an increase in diabetes overall and gestational diabetes among women. Unfavourable dietary habits, overweight among women, higher weight gain during pregnancy and lower physical activity levels are assumed to be important causes of the changes observed. A high maternal weight and gestational diabetes may have negative health effects for the child. The aim was to develop methods and m-learning tools which can be used by health care workers when communicating about diet and health in a setting with a multicultural population.

The app consists mainly of photos of food, and there is a manual for the healthcare worker to read beforehand. This manual should not be used during the consultation, to enable an open two-way conversation between health care worker and client. The photos in the app should be used as a conversation tool, to aid conversation and to give examples of healthy eating. The optimal setting would be that the health care worker and client are sat not with a desk between them, but in a natural setting inviting conversation rather than lecturing. The photos are based around the theory of positive encouragement, so that the healthiest option is at the top and left hand side of the photo, where attention will normally be drawn first (in the western world at least). Furthermore there is very little focus on negative messages, again with the aim of positive encouragement having a better effect than negative messages.

The app focuses on just a few dietary issues considered crucial in diabetes prevention, in line with research on few simple messages versus information overload. The focus is therefore on increasing dietary fibre, decreasing refined sugar in food and drink, and eating the recommended amount of fruit and vegetables. For the midwives' tool there is also a section on food hygiene and toxicity. While, in the public health nurses' tool there is a section on oral hygiene.



The SOMAH app draws on methods of health literacy, where it is important to take into account the clients' level of understanding of their own health status and health information, during a health consultation. Persons with low health literacy levels struggle to make use of the health services in an efficient way and often have poorer health. The SOMAH app is designed to be used with low literacy levels as it focuses on simple messages. With the photos the health care worker can tailor the consultation according to the client's language as well as literacy level. The use of simple language, visual material rather than text, simple messages and few at the time can be helpful in consultations with low health literacy users.

Consulting in a culture sensitive manner is also a main aim of the SOMAH app, where willingness to try to understand the perspective or practice of the client is key. Cultural sensitivity is defined as employing one's knowledge, consideration, understanding, respect to tailor one's advice to each client.

The app also draws on the method of empowerment, where the client is encouraged to suggest and make healthier dietary choices. While the midwife or public health nurse is encouraged to adopt a motivational interviewing style, to help the client feel motivated and take the lead in improving their own dietary habits. We believe it is vital that one employs a cultural sensitive manner in order to achieve a good dialogue with and be able to encourage the client to make these health changes.

Visit the [Knowledge Base](#) page to learn more about inequality in health, digital literacy, motivational interviewing, counselling for change and more. Before using the SOMAH app, take a look at the presentations "Adapting your communication" in the [Knowledge Base](#), to learn more about consulting in a culturally sensitive manner and taking health literacy levels into account.


<http://equitytools.eu/test-af-indholdsside/>

## **2. The intended users/clients**

The SOMAH app is intended to be used by public health nurses and community midwives, in nutrition consultation with pregnant women and parents of young children who fall within the category of overweight or pre diabetic. The app can be especially useful in consultation with those with a low health literacy level, or where there is a language barrier.

## **3. Didactics**

The SOMAH app is intended to be used in a health care setting, be it in a community health centre, doctor's office, hospital or home visit. One of the advantages of m learning tools like the SOMAH app, is that it is designed for a handheld device and can be used anywhere.



The health professional using the app as a consultation tool should have a working knowledge of nutrition, obesity and diabetes, and should be familiar with the terms cultural sensitivity, health literacy and counselling for change.

#### 4. **Step by step guide – on how to use the mobile learning tool.**

##### Installing the SOMAH app on your iPad

To obtain the SOMAH app, please contact Anne Marie Lilleengen [annemarie.lilleengen@hioa.no](mailto:annemarie.lilleengen@hioa.no) who will send you the file by email. You will need a Mac and an iPad.

Save the file on your Mac.

Open the file in iTunes.

Connect your iPad with your Mac.

From iTunes, drag the SOMAH app onto your iPad and press synchronize.

The SOMAH app will now be displayed on your iPad (the icon is orange). The first time you open it it may take a while to launch, please be patient.

##### Using the SOMAH app

The SOMAH app is comprised of photos with which to talk about food. You will not use every photo with each client/patient, only a select few. As you get used to using the app, you will more easily remember the photos and categories and become more efficient at navigating the app. While talking to the client/patient you will get an idea of which nutritional obstacles or advice you will focus on with the particular client.

The photos are organised in categories. There are categories for children and categories for pregnant women. Select only a few issues and corresponding photos for each client, and invite the client to discuss these with you through the photos. The photos should be used as conversation starters and also give simple nutritional messages and ideas.

In the main screen click on the category you wish to discuss. For example, for the category “Fullkorn/Wholegrain” (intended to discuss increasing consumption of wholegrain and fibre in the client's diet), click on the category name or photo. This will bring you to a full-screen view of the category photo (see figure below).

The category photo should be used to assess which staples are most prevalent in the client's diet. Choose the most important one or two to discuss further. If the client eats mostly pasta and

breakfast cereals, for instance, move on to those photos by clicking on the photo containing pasta or breakfast cereal from the selection of photos at the bottom. (Figure 2.) This photo has suggestions of healthier pasta varieties, on the left, and the main photo is of various brands that offer healthier varieties of pasta, all found in supermarkets and/or immigrant shops. There are also key words which the client can look for when shopping for food. This page has a print function at the top right hand corner, so that you can easily print the page for the client. This can be helpful to bring when grocery shopping, either looking for the packaging in the photo, or for the key words.


To move on to other photos, or back to the category view, click on the back button or on one of the smaller photos at the bottom. The app has been designed so that you can touch the full screen photo without this leading on to other photos, with the purpose that you and the client should be able to point to the photos when discussing them. It is important that the client also feels she can point to and talk about the photos, creating an open conversation where both can take the lead.

The layout is designed in a way that should encourage healthier options rather than discourage unhealthy options. This is done for example by having the healthier options on the left hand side, which would normally be taken in first. And furthermore there are only a very few photos



with a negative focus, such as the one focusing on disadvantages of a high sugar diet.

Before using the app, familiarise yourself with all the categories and the photos in them. The fullkorn/wholegrain and drinks categories include a assessment category photo which you use to narrow down to a select few foods to discuss. While the fruit and vegetable category is intended to discuss how many fruit and vegetables to aim for daily, and a suggestion and



inspiration of which fruits and vegetables one might like to try. See what other suggestions your client can come up with. Perhaps there are other fruits and vegetables she uses which she can tell you about, encouraging empowerment. The pregnancy category also contains a section on food hygiene and toxicity. And for the child category there is a section on sugar and oral hygiene, as well as recommendations for baby food.

When downloading the app you will also receive a manual describing each photo.