

Erratum to: Using ApoE Genotyping to Promote Healthy Lifestyles in Finland – Psychological Impacts: Randomized Controlled Trial

H.-L. Hietaranta-Luoma¹ · H.T. Luomala² · H. Puolijoki³ · A. Hopia¹

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In the original version of this article, the description of the recruitment process of the study subjects was somewhat abridged due to limited space, and also concentrated only on the phases and issues crucial to this article. In order to clarify the process further, the phases are now described here in an addendum to this publication in their entirety:

The original article begins the description of the study procedure by stating that the “first contact was made by telephone, when participants were asked whether they were willing to participate in the study...” but the steps in the recruitment process preceding the first personal contact with the potential participants in the form of a telephone call and the source of the telephone number were not specified.

Prior to this telephone call, the volunteers had already taken part in a wider study on the health behaviour habits of the population in the Finnish region of Southern Ostrobothnia. Within this study, they had filled in a questionnaire dealing with health behavioural issues in which they could express their desire to participate in further research in the area by leaving their contact details (email and postage address, and

a telephone number). 260 of those who had indicated their interest and willingness to be involved in further studies were approached by sending them a recruitment letter describing the planned study on the effect of the *APOE* gene variation on cholesterol values, and informing the recipients to expect a subsequent telephone call. 36 extra participants, not part of the initial questionnaire population, contacted the research team in response to a newspaper advertisement for the new study, after which they were sent the same letter. The recruitment letter, its wording approved by the Research Ethical Board, explained the function and allelic variation of the *APOE* gene in clear, understandable Finnish. It also contained the information that the $\epsilon 4$ variant of the gene increases a person’s risk not only for cardiovascular diseases (CVD) but also for Alzheimer’s disease (AD, one copy yielding an approximately 3–4-fold increase in risk, two copies 10–15-fold increase in risk). It was also explained that carrying the $\epsilon 4$ variant does not automatically mean the person is invariably going to have Alzheimer’s disease, and that the pathogenic effects of *APOE* can, at least to some extent, be counteracted by adopting a healthy diet and increasing physical exercise. The communications concerning AD were not elaborated upon in the original article reporting on the results of the study as its research question focussed on the connection of *APOE* and CVD, not AD. However, the increased risk of AD for the *APOE* $\epsilon 4$ carriers was communicated to the potential participants in order to ensure that they were properly informed of the potential implications of the gene test results.

As described in the original article, during the subsequent telephone call the volunteers were interviewed on health issues and their willingness to participate in this new study. They were also asked whether they had received the recruitment letter and read and understood the contents, particularly the fact that the *APOE* $\epsilon 4$ allele (“variant”) predisposes to CVD and AD. The participants were also urged to ask

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✉ H.-L. Hietaranta-Luoma
hlhiet@utu.fi

¹ Functional Foods Forum, University of Turku, Kampusranta 9 C, 60320 Seinäjoki, Finland

² Department of Marketing, University of Vaasa, Vaasa, Finland

³ Central Hospital of Southern Ostrobothnia, Seinäjoki, Finland

questions had they not understood something or should they wish to know more about the issues relating to the study. At the end of the telephone call, the participants were invited to a baseline interview during which their state of health was screened in greater detail as described in the original article. At the interview, the participants signed the informed consent form after they had again been asked whether they understood what the study might reveal to them and informed about their choice to opt out from the study at any point, should they so wish. The consent form, also approved by the Research

Ethical Board, offered the participants an explicit opportunity to refuse disclosure of the genetic information uncovered in the study (via a tickable box: “I do **not** want to be told the results of my APOE gene test”). In the event, no one used this option. The participants were highly motivated and eager to receive information on their health, particularly on their genes.

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