EFFECTS OF THE SPECIFIC MULTINUTRIENT COMBINATION FORTASYN CONNECT IN PRODROMAL ALZHEIMER'S DISEASE (LIPIDIDIET): 36-MONTH INTERVENTION RESULTS

H. Soininen[1,2], A. Solomon[1,3,4], P.J. Visser[5,6], S.B. Hendrix[7], K. Blennow[8,9] M. Kivipelto[1,3,4], T. Hartmann[10,11], on behalf of the LipiDiDiet clinical study group.

[1]Department of Neurology, Institute of Clinical Medicine, University of Eastern Finland and Kuopio University Hospital, Kuopio, Finland
[2]Neurocenter, Department of Neurology, Kuopio University Hospital, Kuopio, Finland
[3]Department of Clinical Geriatrics, NVS, Karolinska Institutet, Huddinge, Sweden
[4]Clinical Trials Unit, Department of Geriatric Medicine, Karolinska University Hospital, 14152 Huddinge, Sweden
[5]Department of Psychiatry and Neuropsychology, Alzheimer Center Limburg, University of Maastricht, Maastricht, the Netherlands
[6]Department of Neurology, Alzheimer Center, VU University Medical Center, Amsterdam, the Netherlands
[7]Pentara Corporation, Salt Lake City, UT, USA
[8]Department of Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, The Sahlgrenska Academy at University of Gothenburg, Mölndal, Sweden
[9]Clinical Neurochemistry Laboratory, Sahlgrenska University Hospital, Mölndal, Sweden
[10]Deutsches Institut für Demenz Prävention (DIDP), Medical Faculty, Saarland University, Homburg, Germany
[11]Department of Experimental Neurology, Saarland University, Homburg, Germany

Objectives: The core 24-month LipiDiDiet[1] trial was a double-blind, parallel group, multi-centre randomised controlled trial (RCT), designed to investigate the effects of the specific multinutrient combination Fortasyn Connect on cognition and related measures in prodromal Alzheimer's disease (AD). Participants were invited to continue in up to four 12-month double-blind extension studies. Here we report results from the 36-month intervention.
Methods: Participants (n=311) were randomised to receive either active or control product once daily. Main outcomes include composite z-scores from a neuropsychological test battery (NTB), Clinical Dementia Rating - Sum of Boxes (CDR-SB), and MRI brain volumes. Statistical analyses were performed using a linear mixed model for repeated measures and a joint model to account for missing data due to dropout.
Results: Previous results from the 24-month core study showed statistically non-significant separations on the primary endpoint (the NTB 5-item composite z-score) and NTB memory. This coincided with a less than expected cognitive decline in the control population. Significant effects were observed on the secondary outcomes CDR-SB and MRI hippocampal volume in favour of the intervention (Soininen et al., Lancet Neurology 2017). Current analyses indicate that this overall directionality persevered and expanded over 36 months of intervention, resulting in statistically significant treatment effects on all these four measures of cognition, function, and disease progression.
Conclusions: This is the first completed double-blind RCT in prodromal AD showing positive results in participants receiving a nutritional intervention for 36 months.

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EFFECTS OF THE SPECIFIC MULTINUTRIENT COMBINATION FORTASYN CONNECT IN PRODROMAL ALZHEIMER'S DISEASE (LIPIDIDIET): DETAILED CHARACTERISATION OF THE 36-MONTH DROPOUT PATTERN

T. Hartmann[1,2], A. Solomon[3,4,5], P.J. Visser[6,7], S.B. Hendrix[8], K. Blennow[9,10], M. Kivipelto[3,4,5], H. Soininen[3,11], on behalf of the LipiDiDiet clinical study group.

[1]Deutsches Institut für Demenz Prävention (DIDP), Medical Faculty, Saarland University, Homburg, Germany
[2]Department of Experimental Neurology, Saarland University, Homburg, Germany
[3]Department of Neurology, Institute of Clinical Medicine, University of Eastern Finland and Kuopio University Hospital, Kuopio, Finland
[4]Department of Clinical Geriatrics, NVS, Karolinska Institutet, Huddinge, Sweden
[5]Clinical Trials Unit, Department of Geriatric Medicine, Karolinska University Hospital, 14152 Huddinge, Sweden
[6]Department of Psychiatry and Neuropsychology, Alzheimer Center Limburg, University of Maastricht, Maastricht, the Netherlands
[7]Department of Neurology, Alzheimer Center, VU University Medical Center, Amsterdam, the Netherlands
[8]Pentara Corporation, Salt Lake City, UT, USA
[9]Department of Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, The Sahlgrenska Academy at University of Gothenburg, Mölndal, Sweden
[10]Clinical Neurochemistry Laboratory, Sahlgrenska University Hospital, Mölndal, Sweden
[11]Neurocenter, Department of Neurology, Kuopio University Hospital, Kuopio, Finland

Objectives: LipiDiDiet[1] is a 6-year, double-blind, parallel group, multi-centre, randomised controlled trial in prodromal Alzheimer's disease (AD), comprising the core 24-month study and up to four 12-month extensions. In this long-term prodromal AD trial, events such as start of AD medication or study discontinuation increase the level of data that is either missing or excluded from efficacy analyses (here referred to as "dropout"). We investigated the pattern, occurrence and potential impact of dropout on the assessment of treatment effects in the 36-month data.
Methods: A detailed evaluation of dropout patterns was performed by grouping participants according to their last observation that was eligible for efficacy analyses, i.e. baseline, 6, 12, 24, and 36 months, and summarising their baseline characteristics, occurrence of intercurrent events, and changes in main outcome parameters over time.
Results: A total of 162 out of 311 randomised participants completed the 36-month study, whereas 149 participants (48%) discontinued. A main reason for dropout was the predefined rule of excluding observations after the start of AD medication or open-label Fortasyn Connect. In general, participants with worse performance at baseline on the main outcome parameters, including NTB 5-item composite, NTB memory, and CDR-SB, tended to dropout from the study earlier and were prone to more rapid decline over time. These dropout patterns and characteristics were observed in both treatment groups.
Conclusions: Dropout patterns were in line with the expectation that baseline performance would be an important predictor of disease progression and dropout in individuals with prodromal AD.

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