

## **An Open-labeled Therapeutic Trial of Functional Food in Old Ischemic Stroke Patients with Sequela of Aphasia**

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**Purpose** : From 1963 to 2007, the rank of stroke remained among the top three of the ten leading causes of death in Taiwan. Although aspirin may prevent recurrent ischemic stroke events, it cannot improve the symptoms of hemiplegia or aphasia in patients. If the neurological deficits result in dependence status with poor self-care for more than 6 months, it is almost impossible to recover and long-term care will be required. It does not only cause financial burdens and pressures on the patients and their families, but also increase social cost. The purpose of the current study was to explore the benefit of functional food on clinical symptoms of old ischemic stroke patients with aphasia by an open labeled clinical trial.

**Methods** : The study involved 9 patients diagnosed with old ischemic stroke with aphasia. For a consecutive period of 12 weeks, the patients took 6 tablets of functional food EASE123 twice per day, at 10:30 AM and 90 minutes before sleep. At 2:30 PM, the patients took 3 tablets of BioBalance#6. The patients were evaluated the condition of aphasia by Concise Chinese Aphasia Test (CCAT).

**Results** After taking functional food, the total CCAT scores of old ischemic stroke patients with aphasia improved significantly at Week 4 ( $p=0.04$ ), Week 8 ( $p=0.02$ ), and Week 12 ( $p=0.02$ ). Simple response improved significantly at Week 4 ( $p=0.04$ ), Week 8 ( $p=0.03$ ), and Week 12 ( $p=0.02$ ). Matching improved significantly at Week 4 ( $p=0.04$ ), Week 8 ( $p=0.04$ ), and Week 12 ( $p=0.04$ ). Auditory comprehension improved significantly at Week 4 ( $p=0.03$ ), and Week 12 ( $p=0.02$ ). Repetition improved significantly at Week 8 ( $p=0.02$ ), and Week 12 ( $p=0.01$ ). Spontaneous writing improved significantly at Week 4 ( $p=0.03$ ), and Week 12 ( $p=0.02$ ).

**Conclusions** : Functional food may provide positive effects on old ischemic stroke patients with aphasia. Four weeks after taking those tablets, the simple response, matching, auditory comprehension, spontaneous writing of language function of the patients all improved significantly. Repetition also improved significantly after Week 8. The study showed that, even for old ischemic stroke patients with aphasia who had been suffering for more than 6 months, it was still possible to improve the language function by using the functional food supplements. The results bring new hope and provide positive evidence to the patients and researchers.

**Keywords:** ischemic stroke, aphasia, functional food