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Effect of 6 weeks consumption of b-glucan rich oat products on cholesterol levels in mildly hypercholesterolaemic overweight adults

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Abstract
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168. EFFECT OF 6 WEEKS CONSUMPTION OF B-GLUCAN RICH OAT PRODUCTS ON CHOLESTEROL LEVELS IN MILDLY HYPERCHOLESTEROLAEMIC OVERWEIGHT ADULTS

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Several regulatory bodies have approved a claim on health benefits of lowering effect of oat B-glucan at levels of 3.0 g/day. This study aimed to test whether 1.5 g/day B-glucan provided as ready-to-eat (RTE) oat flakes was as effective in lowering cholesterol as 3.0 g/day from oats porridge. A 6-week randomised controlled trial was conducted in 87 mildly hypercholesterolaemic (250 mmol/l and <7.5 mmol/l) men and women assigned to one of three diets (25% E protein, 45% E CHO, 30% E fat, at energy requirements for weight maintenance): (1) Minimal B-glucan (Control – C); (2) Low dose oat B-glucan (1.5 g B-glucan; Oats Low – OL) or (3) Higher dose oat B-glucan (3.0 g B-glucan; Oats High – OH). Changes in total and LDL-cholesterol (LDL-C) from baseline were assessed using a linear mixed model and repeated measures ANOVA, adjusted for weight change. Total cholesterol decreased significantly in all groups (~7.8 (SD = 13.8%), ~7.2 (12.4%) and ~5.5 (9.3%) in OH, OL and C groups), as did LDL-C (~8.4 (18.5%), ~8.5 (18.5%) and ~5.5 (12.4%) in OH, OL and C groups) but between-group differences were not significant. In responders only (n = 60), B-glucan groups had higher reductions in LDL-C (~18.3 (11.1%) and ~18.1 (9.2%) in OH and OL groups) compared to controls (~11.7 (7.9%), P = 0.044). Intakes of oat B-glucan were as effective at doses of 1.5 g/day compared to 3 g/day when provided in different food formats that delivered similar amounts of soluble B-glucan.

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163. EFFECT OF VIGNA SINENSIS ON INCREASED PRODUCTION OF BREAST MILK

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Deficiency of the production of breast milk can occur during lactation. In Central Kalimantan, Indonesia, 30% lactating women complained about insufficient milk production. This research aimed to contribute to the availability of breast milk in sufficient amount to help mothers successful in breastfeeding their babies exclusively by making use of Vigna sinesis to increase the production of breast milk. This study was quasi-experiment, conducted on 2011 with an intervention of administration of Vigna Sinesis compared to control group. Follow up was carried out to assess the breast milk production. This study location was in Central Kalimantan Province. The samples were as many as 134 persons meeting inclusion criteria, which were breastfeeding mothers, at term delivery with birth weight of 2250 gram, mothers’ age 20–35 years, babies’ age ≤6 months and the babies having not received any additional food in addition to breastfeeding. The exclusive criteria were either mothers or babies who were sick, mothers who consumed alcohol and mothers who smoked. Data analysis use univariable, bivariable and multivariable. The result showed that after treatment, there was an increased production of breast milk in the intervention group as much as 262.96 ml while in the control group 126.46 ml. Vigna Sinesis could increase the production of breast milk 107.93% higher than the control group with \( p = 0.0000 \) (\( p < 0.05 \)). This research concludes that mothers who consumed Vigna Sinesis had higher production of breast milk than those who did not.

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3.5 ***Hot Topics***

The abstracts for this session were not decided before publication

3.6 COMMUNITY BASED INTERVENTIONS

550. WHAT WORKS FOR COMMUNITY-BASED NUTRITION PROGRAMMING? DEVELOPMENT OF TECHNICAL SUPPORTIVE SUPERVISION IN OROMIA REGION, ETHIOPIA

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The Community Based Nutrition Approach (COBANA) Project in the Oromia Region, Ethiopia began activities in September 2008 for a period of five years. The Project aims to improve the nutrition status of children under five years old and pregnant and lactating women by strengthening community health services in three targeted zones and ten woredas in the region. As supportive supervision and mentoring community workers and supervision of the mother support groups are crucial to the success of community nutrition programs, the Project has conducted Technical Supportive Supervision (TSS) training for more than 350 related persons including health providers from the health facilities linked to the programme and implemented