to the development of organisational adaptive strategies (delegation, ritualization, routinization) to reduce daily dietary tasks but without necessarily being compatible with children's health, sensory awakening and masticatory development.

Conclusions: This socio-anthropological study allows considering 0 to 3 year old baby’s feeding practices beyond classical theoretical growth development models and highlights the importance of young eaters' socialization and its consequences. It demonstrates that young eaters are plural with complex eating habits requiring constant re-adjustments from their caregivers.

Keywords: (maximum 5): childhood, food, socialization, nutrition, caregivers

149/683. Nutritional knowledge and nutritional behaviour of primary school pupils in Germany

Author(s): Cornelie Pfau; Eva Goos-Balling.


Introduction: Nutritional educational measures are aimed at the improvement of knowledge and behaviour. The effects of measures on knowledge and behaviour have to be evaluated, and if necessary modified.

Objectives: To investigate nutritional knowledge on food items for morning breaks, the behaviour of pupils, and to assess differences between both.

Method / Design: During the project “Focus on school milk” (2008/09) self-administered questionnaires were completed by pupils and their parents. Information on nutritional knowledge (“If eating and drinking in breaks: What do you think is especially good for pupils?”) and behaviour (“What do you take to school for eating and drinking?”) originate from pupils’ questionnaires. Additionally, a teaching unit concerning “a healthy breakfast with milk” was conducted. Data analyzed refer to 7,921 pupils. Chi2 tests were applied to reveal ching unit concerning “a healthy breakfast with milk” was conducted.

Results: Fruit (63%), bread/rolls (47%), vegetables (44%), bread/rolls with cheese (25%) and with sausage (23%) were most frequently seen as especially “good food for breaks”. Pupils having attended the teaching unit named more frequently vegetables, bread/rolls with cheese and less frequently sweets than pupils not having attended the teaching unit. Gender, migration background and class level are of greater importance to knowledge than the teaching unit. There is a gap between knowledge on healthy food items and the items actually taken to school. So e.g. fruit and vegetables are estimated as “good food for breaks” of 63% resp. 44% of the pupils, but taken to school of 49% resp. 24%.

Conclusions: To close the gap between knowledge and behaviour nutritional educational measures for pupils have to consider factors like gender and migration background. As parents are responsible for the food choice, more importance should be laid on nutritional educational measures for parents.

Keywords: (maximum 5): Educational measure, nutrition, knowledge, behaviour, pupils

149/686. Ochratoxin a, a food contaminant modulate inflammation in the liver of weanling piglets

Author(s): (1) Daniela Eliza Marin; (2) Gina Cecilia Pistol; (3) Mihai Gras; (4) Monica Motiu; (5) Ionelia TARANU.


Introduction: Ochratoxins are fungal secondary metabolites produced by fungus during food/feed storage. OTA has a multiple toxicity, being nephrotoxic, genotoxic and immunotoxic. According to the EC 576/2006 concerning the presence of OTA in feed, the maximal level of OTA recommended for complementary and complete feeding stuffs for pigs is 50 ppb. For OTA, there are no regulation concerning the maximal admitted level issued by the EC, but only recommendations, and recently the EFSA has recommended in-depth studies.

Objectives: In the present study we have investigated the effect of 50 ppb OTA (CE/576/2006 recommendation), as maximum admitted dose in complementary and complete feeding stuffs for pigs on the liver inflammation in weanling piglets.

Method / Design: A feeding trial was conducted to evaluate the effect of a OTA-contaminated diet on inflammation (cytokines: TNF-α, IL-1β, IFN-gamma, IL-8, IL-4, IL-10) and other molecules involved in inflammatory processes (NF-kb, COX2 and iNOS) in weaned pigs. They fed on a corn-soybean meal basal diet and were randomly assigned to either a control (diet without mycotoxin) or OTA (50 ppb). In order to evaluate effects of OTA on the above gene expression and synthesis in liver, real-time PCR and respectively ELISA assays were used.

Results: The toxin doesn’t affect the expression of the cytokines genes or the genes involved in inflammatory processes. However, 50 ppb of OTA tend to decrease the COX2 and IFN-gamma expression and significantly reduced the expression of IL-6 cytokine.

Conclusions: Even the recommended level of 50 ppb OTA intoxication resulted in low modifications of the expression of inflammatory cytokines and genes involved in inflammatory processes, it alters IL-6 and IFN-gamma synthesis and this may arise some questions concerning the safety of the CE recommendation for the maximum admitted level of OTA in the pig feeding stuff.