**Appendix 1: Literature search strategy for development of sweet taste and preference for sweet foods**

A systematic review of the literature using defined search criteria was performed. A PubMed, EMBASE and Cochrane Central Register of Controlled Trials CENTRAL, search up till March 2015 was conducted with the use of the following key terms (words in the title or abstract as well as Mesh terms). An example of search strategy for PubMed: (1) (Sugar in solid form) OR (2) (Sugar in liquid form) AND (3) (Pregnancy/lactation) OR (4) (Infancy/childhood) AND (5) (Taste) AND (6) (Studies).

(1): fructose[TIAB] OR sucrose[TIAB] OR sugar\*[TIAB] OR high fructose corn syrup\*[TIAB] OR dietary carbohydrate\*[TIAB] OR glucose[TIAB] OR galactose[TIAB] OR maltose[TIAB] OR monosaccharide\*[TIAB] OR lactose[TIAB] OR disaccharide\*[TIAB] OR infant food\*[TIAB] OR baby food\*[TIAB] OR fruit yogurt\*[TIAB] OR "fructose"[Mesh] OR "sucrose"[Mesh] OR "dietary carbohydrates"[mesh] OR "monosaccharides"[mesh:noexp] OR "disaccharides"[mesh:noexp] OR "glucose"[mesh:noexp] OR "galactose"[mesh] OR "maltose"[mesh] OR "lactose"[mesh] OR "Sweetening Agents"[mesh] OR "infant food"[mesh] OR "yogurt"[mesh]

OR

(2): carbonated beverage\*[TIAB] OR energy drink\*[TIAB] OR juice\*[TIAB] OR soft drink\*[TIAB] OR fruit\*[TIAB] OR infant formula[TIAB] OR infant formulas[TIAB] OR (milk[TIAB] AND (breast[TIAB] OR mother\*[TIAB] OR human[TIAB] OR formula[TIAB] OR formulas[TIAB] OR soy[TIAB] OR chocolate[TIAB] OR artificial[TIAB] OR maternal[TIAB])) OR ((sweet[TIAB] OR sweetened[TIAB] OR sugar[TIAB] OR sugary[TIAB]) AND (beverage\*[TIAB] OR drink\*[TIAB] OR tea[TIAB])) OR "carbonated beverages"[mesh] OR "energy drinks"[mesh] OR "beverages"[mesh:noexp] OR "milk, human"[mesh] OR "soy milk"[mesh] OR "milk"[mesh:noexp] OR "tea"[mesh] OR "fruit"[mesh]

AND

(3): pregnan\*[TIAB] OR breast feeding[TIAB] OR lactation[TIAB] OR lactating[TIAB] OR mother\*[TIAB] OR "pregnancy"[mesh] OR "breast feeding"[mesh] OR "lactation"[mesh] OR "weaning"[mesh] OR "mothers"[mesh]

OR

(4): fetus\*[TIAB] OR infant\*[TIAB] OR infancy[TIAB] OR preschool\*[TIAB] OR toddler\*[TIAB] OR child\*[TIAB] OR pediatr\*[TIAB] OR paediatr\*[TIAB] OR "fetus"[mesh] OR "infant"[mesh] OR "child"[mesh]

AND

(5): ((flavor[TIAB] OR flavour[TIAB] OR taste[TIAB] OR sweet\*[TIAB] OR food[TIAB] OR gustatory[TIAB]) AND (learning[TIAB] OR percepti\*[TIAB] OR programming[TIAB] OR preference\*[TIAB] OR tasting[TIAB] OR acceptanc\*[TIAB] OR experienc\*[TIAB] OR sensing[TIAB] OR sensation\*[TIAB])) OR (sweet[TIAB] AND taste\*[TIAB]) OR sweet tooth[TIAB] OR sweetness[TIAB] OR "taste perception"[mesh] OR "food preferences"[mesh] OR "taste"[mesh]

AND

(6): (((((((((("consensus development conference"[TIAB] OR "consensus development conference"[pt] OR ("Guidelines as Topic"[Mesh] OR "Health Planning Guidelines"[Mesh]) OR "Guideline"[pt] OR "consensus statement"[TIAB] OR guideline\*[TIAB])) OR ((systematic\*[TIAB] AND (bibliographic\*[TIAB] OR literature[TIAB] OR review[TIAB] OR reviewed[TIAB] OR reviews[TIAB])) OR (comprehensive\*[TIAB] AND (bibliographic\*[TIAB] OR literature[TIAB])) OR "cochrane database syst rev"[Journal] OR "Evidence report/technology assessment (Summary)"[journal] OR "Evidence report/technology assessment"[journal] OR "integrative literature review"[TIAB] OR "integrative research review"[TIAB] OR "integrative review"[TIAB] OR "research synthesis"[TIAB] OR "research integration"[TIAB] OR cinahl[TIAB] OR embase[TIAB] OR medline[TIAB] OR psyclit[TIAB] OR (psycinfo[TIAB] NOT "psycinfo database"[TIAB]) OR pubmed[TIAB] OR scopus[TIAB] OR "web of science"[TIAB] OR "data synthesis"[TIAB] OR meta-analys\*[TIAB] OR meta-analyz\*[TIAB] OR meta-analyt\*[TIAB] OR metaanalys\*[TIAB] OR metaanalyz\*[TIAB] OR metaanalyt\*[TIAB] OR "meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR ((review[TIAB] AND (rationale[TIAB] OR evidence[TIAB])) AND review[pt]))) OR "Epidemiologic Studies"[Mesh:noexp]) OR ("Clinical Trial"[Publication Type:noexp] OR "clinical trial, phase i"[publication type] OR "clinical trial, phase ii"[publication type] OR "clinical trial, phase iii"[publication type] OR "clinical trial, phase iv"[publication type] OR "controlled clinical trial"[publication type] OR "multicenter study"[publication type] OR "randomized controlled trial"[publication type] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[TIAB] OR randomized[TIAB]) AND (trial[TIAB] OR trials[TIAB])) OR ((single[TIAB] OR double[TIAB] OR doubled[TIAB] OR triple[TIAB] OR tripled[TIAB] OR treble[TIAB] OR treble[TIAB]) AND (blind\*[TIAB] OR mask\*[TIAB])))) OR ("Case-Control Studies"[Mesh:noexp] OR "retrospective studies"[mesh:noexp] OR "Control Groups"[Mesh:noexp] OR (case[TIAB] AND control[TIAB]) OR (cases[TIAB] AND controls[TIAB]) OR (cases[TIAB] AND controlled[TIAB]) OR (case[TIAB] AND comparison\*[TIAB]) OR (cases[TIAB] AND comparison\*[TIAB]) OR "control group"[TIAB] OR "control groups"[TIAB])) OR ("cohort studies"[mesh:noexp] OR "longitudinal studies"[mesh:noexp] OR "follow-up studies"[mesh:noexp] OR "prospective studies"[mesh:noexp] OR "retrospective studies"[mesh:noexp] OR cohort[TIAB] OR longitudinal[TIAB] OR prospective[TIAB] OR retrospective[TIAB]))))))) OR (((((randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[TIAB] OR "clinical trials as topic"[mesh:noexp] OR randomly[TIAB] OR trial[ti]) NOT ("animals"[mh] NOT "humans"[mh])))))

Studies were included if they met one of the following criteria: randomized controlled trial (RCT), cohort studies, cross sectional studies, clinical trials, epidemiological studies, systematic reviews, meta-analyses and consensus statements/guidelines (other studies). Case-control studies and qualitative studies/research were not included into analysis. Only conducted in humans studies and published data were taken into consideration. Systematic review resulted in 1,293 studies: From them two authors independently and combined selected 19 relevant RCTs and 44 other relevant studies. Reference lists of included studies and other relevant articles (n=40) were searched. A narrative summary of the selected papers is provided in the text.