Additional file 2

Definitions of the final themes mapped to construct the conceptual model

***A priori* themes after deductive reasoning**
***A priori* themes retained as such**
1. *Awareness:* The knowledge about health risks and the benefits of different health practices, including knowledge about the causes, consequences and solutions for a particular problem behaviour. 2. *Self-evaluation:* Self-assessment of a particular behaviour in terms of possibilities and potential avenues for bringing about a change in the said behaviour. 3. *Helpful relationships:* Includes relationships that promote caring, trust, openness, acceptance and support for the healthy behaviour change. 4. *Perceived seriousness:* Judgment as to the seriousness or severity of the disease, health problem or behaviour. 5. *Personal modifiers:* Characteristics that influence personal perceptions, such as culture, education level and past experiences. 6. *Attitude:* Refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question.
***A priori* themes retained with modifications**
1. *Identifying stages-of-change (pre-contemplation, intention and action):* This is the key construct of the model, which focused on identifying cues to differentiate households to three stages-of-change (instead of the original five: pre-contemplation, contemplation, preparation, action, maintenance). • Pre-contemplation (pre-contemplation): people do not intend to take action in the foreseeable future. • Intention (contemplation + preparation): people intend to take action in the immediate future, hence are more aware of the pros and cons; and have already taken some significant steps in a positive direction. • Action (action + maintenance): people have made specific overt modifications in their life-styles or are engaged to prevent relapse. 2. *Household efficacy:* belief or confidence in their ability as a household to control their behaviour and bring about a change or cope with different situations without relapsing to the earlier unhealthy habit. 3. *Decisional balance*: relative weighing of the pros and cons of changing behaviour; and their opinion of the value or usefulness of a new behaviour in decreasing the risk of developing a disease or health problem in terms of the expected costs and benefits. 4. *Substitution opportunities:* learning of healthier behaviour that can substitute for problem or unhealthy behaviour. 5. *Perceived risk:* self-assessment of the chances of acquiring a disease or health problem due to the continuation of an unhealthy behaviour. 6. *Perceived societal response:* perceived social pressure to perform or not to perform a particular behaviour. 7. *Cues to action:* events, people or things that prompt a desire to change behaviour.

New themes identified after inductive reasoning
1. *Accessibility:* combination of availability that includes physical access and affordability that includes all the costs associated with accessing foods. 2. *Perceived needs and preferences:* special needs and preferences of other household members as perceived by the female head of the household. 3. *Societal norms:* gender, socio-economic status and other higher hierarchical power structures in the household and community that influence behaviour. 4. *Perceived household response:* includes perceived willingness (or consent) to participate in a behaviour-change intervention; and the level of cooperation expected from other household members for such an endeavour as perceived by the female head of the household.