### Key Concepts that are relevant for primary school children*

#### Key Concepts taught in The Health Choices Book

**RECOGNISING CLAIMS ABOUT THE EFFECTS OF TREATMENTS THAT HAVE AN UNRELIABLE BASIS**
- Treatments may be harmful
- Personal experiences or anecdotes (stories) are an unreliable basis for assessing the effects of most treatments
- Widely used treatments or treatments that have been used for a long time are not necessarily beneficial or safe
- New, brand-named, or more expensive treatments may not be better than available alternatives
- Opinions of experts or authorities do not alone provide a reliable basis for deciding on the benefits and harms of treatments
- Conflicting interests may result in misleading claims about the effects of treatments

**UNDERSTANDING WHETHER COMPARISONS OF TREATMENTS ARE FAIR AND RELIABLE**
- Identifying effects of treatments depends on making comparisons
- Apart from the treatments being compared, the comparison groups need to be similar at the beginning of a comparison (i.e. "like needs to be compared with like")
- If possible, people should not know which of the treatments being compared they are receiving
- Small studies in which few outcome events occur are usually not informative and the results may be misleading
- The results of single comparisons of treatments can be misleading

**MAKING INFORMED CHOICES ABOUT TREATMENTS**
- Decisions about treatments should not be based on considering only their benefits

#### Other Key Concepts prioritised for children

**RECOGNISING CLAIMS ABOUT THE EFFECTS OF TREATMENTS THAT HAVE AN UNRELIABLE BASIS**
- An outcome may be associated with a treatment, but not caused by the treatment
- Increasing the amount of a treatment does not necessarily increase the benefits of a treatment and may cause harm
- Hope or fear can lead to unrealistic expectations about the effects of treatments
- Beliefs about how treatments work are not reliable predictors of the actual effects of treatments
- Large, dramatic effects of treatments are rare

**UNDERSTANDING WHETHER COMPARISONS OF TREATMENTS ARE FAIR AND RELIABLE**
- People in the groups being compared need to be cared for similarly (apart from the treatments being compared)
- If possible, people should not know which of the treatments being compared they are receiving
- It is important to measure outcomes in everyone who was included in the treatment comparison groups
- Results for a selected group of people within a systematic review of fair comparisons of treatments can be misleading
- Reviews of treatment comparisons that do not use systematic methods can be misleading

**MAKING INFORMED CHOICES ABOUT TREATMENTS**
- A systematic review of fair comparisons of treatments should measure outcomes that are important
- Well done systematic reviews often reveal a lack of relevant evidence, but they provide the best basis for making judgements about the certainty of the evidence

*Link to an explanation of each of these concepts.

We have identified 36 Key Concepts that people need to understand and apply to assess claims about the effects of a treatment (any action intended to improve health) and make informed health choices. Based on discussions with primary school teachers [Nsangi 2015], we determined that the 24 concepts listed above can be learned and applied by 10 to 12 year olds. Based on experience from pilot testing of learning resources for all 24 concepts, we determined that 24 concepts were too many to learn in one go. We selected the first 12 concepts listed above based on our assessments of how important the concepts were for primary school children and how difficult it was for primary school children to understand the concepts, based on pilot and user testing.