**Glycemic Index Test Protocol Checklist**

**Instruction**

Please complete all items below and attach document with submission form

**Protocol Title**……………..

**Principal investigator**……

**1. Participants**

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| 1.1 Number of healthy volunteer[ ] Group of 5 for identical macronutrient composition but different flavors e.g. concentration of active ingredient[ ] 10If not as above, please state reason why……. |
| 1.2 Exclusion criteria cover *ALL* of the followings:* known food allergy or intolerance
* medications known to affect glucose tolerance
* a known history of diabetes mellitus or the use of antihyperglycaemic drugs or insulin to treat diabetes and related conditions
* a major medical or surgical event requiring hospitalization within the preceding 3 months;
* the presence of disease or drug(s) which influence digestion and absorption of nutrients;
* the use of steroids, protease inhibitors or antipsychotics (all of which have major effects on glucose metabolism and body fat distribution).

[ ] Cover all criteria[ ] Not all. (Please state the reason……) |
| 1.3 Test conditions requirement for participants1. NOT take food or drink other than water for *10 h or more* prior to the test;
2. NOT taking alcohol on the previous evening;
3. NOT having  vigorous exercise on the morning of the test.

[ ] ALL requirements are stated in protocol and participant information sheet[ ] Not all (Please explain……) |

**2. Tested products**

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| **2.1 Reference food in the protocol**[ ] Glucose solution prepared from anhydrous glucose powder (50 g/250 ml water)[ ] Prepare fresh[ ] Stored in a refrigerator and used within 72 hours[ ] Dextrose (glucose monohydrate, 55 g); [ ] Commercial solution used for the oral glucose tolerance test containing glucose (50 g); (Please specify commercial source……………….)[ ] White bread or other specific carbohydrate food of consistent composition and GI. Please specify commercial source of reference food (…………..…..)  |
| **2.2 The reference food is tested in each subject at least two or three times on separate days within the immediate 3 month-period** [ ] Yes[ ] Two times [ ] Three times[ ] No (Please explain…….)  |
| **2.3 Product to be tested for GI** 2.3.1 Brief description………Type of product [ ] Commercial product in the market (Specify….)[ ] Product under development |
| 2.3.2 Detail of product and preparation for testing provided in separate document[ ] Provided [ ] Not provided (State the reason…..) |
| 2.3.3 Carbohydrate portion of the test food [ ] 50 g of glycaemic carbohydrate and consumable within the time frame of 12 min to 15 min [ ] 25 g of glycaemic carbohydrate because the bulk of food providing 50 g is unreasonably large[ ] Less than 10 g glycaemic carbohydrate per regular serving ( This should not be tested for GI. If tested, state the reason why…….) |
| 2.3.4 Test product prepared with milk[ ] Yes (as milk may influences the final GI of some products, please state the reason why………)[ ] No |

**3. Experimental procedure**

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| 3.1 Blood samples for 3.1.1 measuring fasting glucose[ ] Finger prick (prefer) [ ] Venous blood[ ] Two samples taken within 5 min. If not, please explain……….3.1.2 GI Determination[ ] 6 samples shall be taken at 15 min, 30 min, 45 min, 60 min, 90 min, and 120 min[ ] More or less (Please explain………)  |
| 3.2 Taking food[ ] Within 12-15 min [ ] Other………. |
| 3.3 Food preparation[ ] in 250-500 ml water [ ] in 250-500 ml coffee or tea (adding 30 ml milk and non-nutritive sweetener is acceptable) |

**4. Blood glucose analysis**

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| 4.1 Analytical method[ ] Spectrophotometry [ ] Electrochemical detection-coupled enzyme systems *Note: small glucometer devices used for self-blood glucose monitoring have published analytical CVs above 3,6 % and are therefore not suitable for GI testing*  |
| 4.2 Reference laboratory……………………. |

This checklist is prepared by Office of Research Ethics, Research Institute for Health Science, CMU, using ISO 26642:2010(E) as the reference.