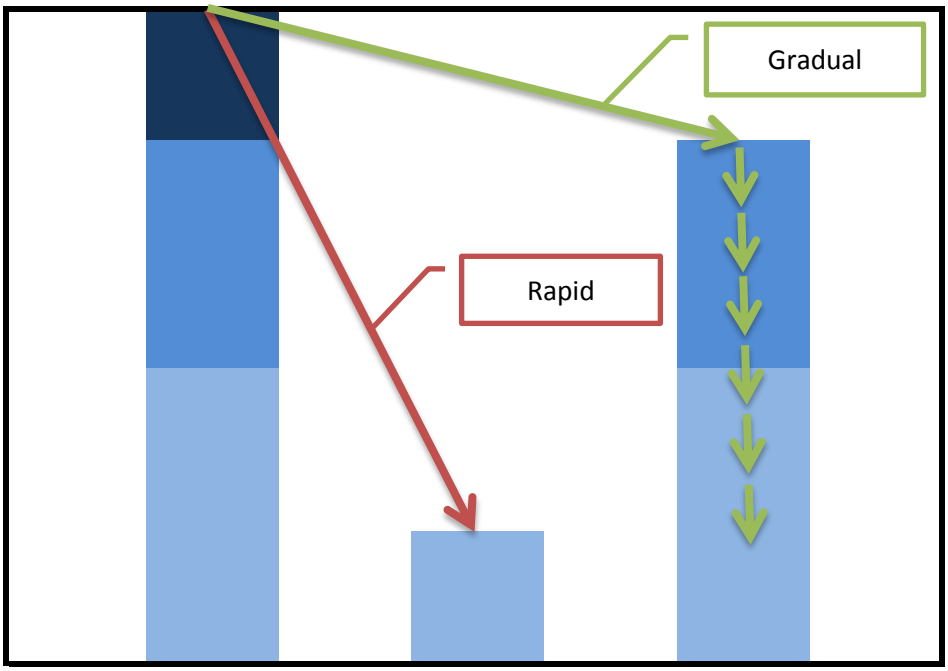
Hyperglycemia suppression test report

Measuring the activity inhibition of α -Glucosidase

Analyte: McB



Tested	AGH inhibit ability (%)
Untreated	100
Positive target	33
McB	86

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Today in Japan, 1/6 of all people are patients of diabates or about to be.
Then our urgent need is for prevention and countermeasure.

Human body raises blood glucose levels by aborting glucose, which is converted from decomposed disaccharides by α -glucosidase, from small intestin.

Diabates patients and people who are worrying about their blood glucose levels ingests medicine for inhibiting α -glucositase before they eat.
However, descending blood glucose by using medicines sometimes cause hypoglycemia.

Today, natural foods, which have these gradual descent ability against blood glucose, is noted very much although it doesn't have rapid action.
But this is suitable for supporting our body gently, softly and slowly.

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Test Description

After extracted analyte 1.0g with using 50% ethanol solution 20ml, made analyte solution 5mg/ml by diluted by 0.05mol/l of phosphate buffer (pH6.7).
Then we measured its AGH inhibition ability of this analyte solution by Yamaki and Mori's methods (1).
Measuring absorbance of ρ -nitropenol made with decomposed ρ -nitrophenyl-α-D- glucopylanoside (as substrate) by AGH. Activity inhibition was evaluated by comparing with ability level of untreated as 100%. At the same time tested deoxynojirimycin solution (0.2 μ g/ml) with the same situation as the inhibitor of AGH, and set it as the positive target.

Results and consideration

We showed these two results of analyte solution and the positive target on figure.
Analyte's AGH inhibition ability is 86% of untreated, then we can see few AGH activity inhibition is in the analyte.

References

(1) Koji Yamaki, Takashi Mori： 簡便なα-グルコシダーゼ抑制活性測定法 : 抑制曲線の傾きを用いる方法, Japan Food Science & Engineering Journal, 53,4,229-231 (2006).