A method for predicting the risk of obesity in a subject

Summary

In one aspect, there is provided a method for determining the fat processing activity and/or for predicting the risk of obesity in a subject comprising: determining by an immunoassay the fasting level of pro-neurotensin 1-117 or pro-neurotensin 1-117 comprising peptides in a bodily fluid obtained from said subject or determining the fasting level of pro-neurotensin 1-117 in a bodily fluid obtained from said subject; and correlating said fasting level of pro-neurotensin 1-117 or pro-neurotensin 1-117 comprising peptides with the fat processing activity and/or the a risk of incidence of obesity in said subject, wherein an elevated level is indicative of an enhanced fat processing activity and/or predictive for an enhanced risk of obesity and wherein subject is not obese at the time the sample of bodily fluid is taken from said subject, and wherein elevated level means a level above a certain threshold level.

Detailed Description

Subject matter of the present invention is a method for determining the fat processing activity and/or for predicting the risk of obesity in a subject comprising the following steps:

- determining by an immunoassay the level of pro-neurotensin 1-117 or fragments thereof of at least 5 amino acids or pro-neurotensin 1-117 comprising peptides in a bodily fluid obtained from said subject or
- determining the level of pro-neurotensin 1-117 or fragments thereof of at least 5 amino acid in a bodily fluid obtained from said subject; and
- correlating said level of pro-neurotensin 1-117 or fragments thereof or pro-neurotensin 1-117 comprising peptides with the fat processing activity and/or the a risk of incidence of obesity in said subject, wherein an elevated level is indicative of an enhanced fat processing activity and/or predictive for an enhanced risk of obesity

and wherein subject is not obese at the time the sample of bodily fluid is taken from said subject.

CLAIMS

1. A method for determining the fat processing activity and/or for predicting the risk of obesity in a subject comprising:

- determining by an immunoassay the fasting level of pro-neurotensin 1-117 or pro-neurotensin 1-117 comprising peptides in a bodily fluid obtained from said subject or
- determining the fasting level of pro-neurotensin 1-117 in a bodily fluid obtained from said subject; and
- correlating said fasting level of pro-neurotensin 1-117 or pro-neurotensin 1-117 comprising peptides with the fat processing activity and/or the a risk of incidence of obesity in said subject, wherein an elevated level is indicative of an enhanced fat processing activity and/or predictive for an enhanced risk of obesity

and wherein subject is not obese at the time the sample of bodily fluid is taken from said subject,

and wherein elevated level means a level above a certain threshold level

2. A method according to claim 1, wherein said subject is a non-prediabetic (non-IFG) subject.

3. A method according to claim 1 or 2, wherein the fasting level of pro-neurotensin 1–117 or pro-neurotensin 1-117 comprising peptides is determined.

4. A method according to any of claims 1 to 3, wherein the level of pro-neurotensin 1-117 is determined.

5. A method according to any of claims 1 to 4 wherein the subject is non-diabetic with fasting whole blood glucose of less than 6.1 mmol/l but more than 5.4 mmol/l

6. A method according to any of claims 1 to 5 wherein the subject does not have cancer.

7. A method according to any of claims 1 to 6 wherein the subject has no history of diagnosis of an acute cardiovascular event at the time the sample of bodily fluid is taken from said subject wherein said cardiovascular event is selected from the group comprising

myocardial infarction, stroke, acute heart failure and cardiovascular death related to myocardial infarction, stroke or acute heart failure.

8. A method according to any of claims 1 to 7 wherein the subject does not have the metabolic syndrome.

9. A method according to any of claims 1 to 8, wherein said subject is a subject with fasting whole blood glucose of less than 5.4 mmol/l.

10. A method according to any of claims 1 to 9, wherein the risk of obesity is independent of the risk for contracting diabetes mellitus and/or metabolic syndrome.

11. A method according to claims 1 to 10, wherein additionally at least one clinical parameter is determined selected from the group comprising age, gender, systolic blood pressure, diastolic blood pressure, antihypertensive treatment (AHT), waist circumference, waist-hip-ratio, current smoker, diabetes heredity and previous cardiovascular disease (CVD).

12. Method according to any one of the preceding claims, wherein the sample is selected from the group comprising blood sample, a serum sample, a plasma sample, a cerebrospinal fluid sample, a saliva sample and a urine sample or an extract of any of the aforementioned samples.

13. A method according to any of claims 1 to 13, wherein said a method is performed more than once in order to monitor the risk of incidence of obesity.

14. A method according to claim 14, wherein said monitoring is performed in order to evaluate the response of said subject to preventive and/or therapeutic measures taken.

15. A method according to any of claims 1 to 15, wherein said monitoring is performed in order to stratify said subjects into risk groups.