

报告编号 : 2401-GI-002  
REPORT No.  
页码 PAGE : 1 of 6

### 血糖生成指数 (GI) 测试报告

#### 客户信息 Applicant Information

委托单位 Submitter 杭州万泰认证有限公司  
委托客户地址  
Submitter Address 杭州市滨江区江虹路 1750 号信雅达国际创意中心 1 幢 14 楼  
受检单位 Submitter For 杭州粮康荟生物科技有限公司  
受检单位地址  
Submitter for Address 浙江省杭州市钱塘区白杨街道 10 号大街 36 号 2 幢

#### 样品信息 Sample Information

样品名称 Sample Name	大米 (粮康荟低 GI 大米)	样品编号 Sample Number	2401-GI-003-A
型号/规格 Specification	500g/袋	样品量 Sample Quantity	3kg
包装方式 Packing	袋装, 非预包装	样品状态 Character	固有形态, 适检
生产商 Manufacturer	常山县常鱼米厂	生产日期/批号 Produced Date/Batch No.	/
接收日期 Date Received	2024.01.16	测试日期 Test Date	2024.01.18~2024.01.29

以上样品及信息由客户提供及确认, 其真实性由客户负责。

The above samples and information are provided and confirmed by the customer, and their authenticity is the responsibility of the customer.





BUREAU  
VERITAS

# 测试报告

## TESTING REPORT

报告编号 : 2401-GI-002  
REPORT No.  
页码 PAGE : 2 of 6

### 测试信息 Test Information

测试项目 Items	血糖生成指数 (GI)
测试方法 Methods	WS/T 652-2019 《食物血糖生成指数测定方法》
测试原理 Test Principle	招募一定数量的受试者, 进食含目标量 (通常为 50 g) 可利用碳水化合物的食物后, 一段时间内 (2 h) 血糖应答曲线下面积相比空腹时的增幅除以进食含等量可利用碳水化合物的参考食物 (葡萄糖) 后相应的增幅, 以百分数表示。

### 测试方案 Test Plan

基本原则 Fundamental Principle	采用随机设计原则
测试周期 Test Period	3 次独立试食测定, 第一次为参考食物, 第二次为待测食物, 第三次为参考食物, 每次独立试食测定间隔为 72h。 参考食物: 食品级无水葡萄糖
受试食物准备 Food preparation for the test	受试食物配制: 取 50g 参考物质, 加纯净水溶解至 250 mL, 当日使用前配制。 对待测大米约 67g/人份。大米准备分 2 组, 每组 7 人份约 469g 大米, 用 1.5L 纯净水快速洗米, 重复 2 次, 洗米后倒入电饭煲, 加水量和蒸煮时间根据电饭煲而定, 保证软硬适中, 蒸煮后大米饭均分 7 人份, 食用过程中饮用少量温水。
试食测定操作程序 Test food determination operation procedure	1) 测定前三日受试者规律作息, 正常饮食; 测定前一日晚餐避免高膳食纤维及高糖食物, 22:00 前开始禁食; 测定当日清晨避免剧烈运动, 受试者静坐 10 min 后开始试食测定。 2) 间隔 5 min 采集 2 次空腹血样。 3) 开始进食, 严格控制进食时间, 在 5~10min 内进食完全部受试物及水, 从第一口进食时间开始计时。 4) 分别于餐后 15 min、30 min、45 min、60 min、90 min 和 120 min 采集血样。保证采血时间点的一致性和准确性。

Bureau Veritas Science and Technology Service (Xi'an) Co., Ltd.  
必维科技服务 (西安) 有限公司  
Floor 1, 2, 3 and 8, North Building of Inspection and Testing Building, Wangsisi Street No. 787, Fengdong NewTown, Xi'an, Shaanxi Province  
陕西省西安市沣东新城王寺西街787号检验检测大楼北楼1、2、3、8层  
Tel 029-68322100  
Web cps.bureauveritas.com

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

本报告受 <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> 发布之日发布的测试条件约束, 并通过引用纳入本报告, 仅供您使用。只有在事先得到我们的书面许可的情况下, 才允许向任何其他个人或实体复制或为其复制本报告, 或使用我们的名称或商标。本报告只阐述了我们对此处已确定的测试样本的调查结果。除非特别明确指出, 本报告中列出的结果并不表示或代表抽取测试样品的批次或任何类似或相同产品的质量或特性。我们的报告包括您要测试的所有测试, 以及根据您提供给我们的信息得出的结果。测量的不确定性只有在认可测试的要求下才会提供。符合性声明是基于简单的验收标准, 不考虑测量不确定性, 除非另有书面要求。自本报告发布之日起, 贵方有 60 天的时间通知我们由于我们的疏忽造成的任何重大错误或遗漏, 或者如果您要求提供测量不确定度; 但是, 这种通知应是书面的, 并应具体说明贵方希望提出的问题。如果没有在规定的时间内提出这样的问题, 将构成您对本报告的完整性、所进行的测试和报告内容的正确性的无条件接受。



报告编号 : 2401-GI-002  
REPORT No.  
页码 PAGE : 3 of 6

### 血糖测定 Blood Sugar Test

采血部位: 指尖毛细血管

血糖测定: 采用葡萄糖氧化酶法测定各时间点血样血糖浓度, 单位为毫摩尔每升 (mmol/L)。

绘制血糖应答曲线: 以时间为横坐标, 以血糖浓度为纵坐标绘制折线图。

### GI值计算 GI Calculation

- 1) 完成至少 2 次参考食物和 1 次待测食物试食测定的受试者可以纳入 GI 计算。
- 2) 根据时间 (min) 和血糖变化量 (mmol/L), 采用几何法计算高于空腹血糖基础水平的部分的面积和 (血糖应答曲线下面积增幅 IAUC)。
- 3) 根据待测食物 IAUC 值与同一个体测得的 2 次参考食物 IAUC 平均值的比例求得受试者个体得出的 GI 值。

### 受试者信息 Participants Information

受试者人数

Participants No.

男: 7 例 女: 7 例

年龄范围 Age Range

19 ~ 30 岁

体质指数范围 (BMI Range)

18.5kg/m<sup>2</sup> ~ 24.0kg/m<sup>2</sup>

其他 Others

- 1) 健康成年人, 非孕妇及乳母。
- 2) 无糖尿病史 (或糖耐量受损), 无其他代谢性疾病、消化系统疾病、内分泌系统疾病和精神疾病等。
- 3) 无对待测食物过敏史和不耐受史。
- 4) 近 3 个月内未服用影响糖耐量的营养素补充剂, 以及未口服避孕药、乙酰水杨酸、类固醇、蛋白酶抑制剂和抗精神病药等药物。
- 5) 能够耐受至少 10h 的空腹状态。
- 6) 受试前均签署知情同意书。





BUREAU  
VERITAS

# 测试报告

## TESTING REPORT

报告编号 : 2401-GI-002  
REPORT No.  
页码 PAGE : 4 of 6

### 测试结果 Test Result

受试者个体GI <sub>n</sub> 值	42.3	56.0	61.6	57.2	33.4	58.2
GI <sub>n</sub> of Participants	53.0	62.0	61.1	58.0	60.0	50.7
待测食物GI值						
GI of Sample	54					

测试结论 Conclusion GI < 55, 受试结果表明本样品为低GI食物。

备注: 1) 本次测试结果仅对送检样品负责。The test results are only responsible for the samples.

2) 人体受试结果目的是给出待测食物 GI 值, 受试结果不做为产品安全性, 医学诊断等其他无关的证明。The purpose of the human body test results is to give the GI value of the food to be tested, and the test results are not used as proof of product safety, medical diagnosis and other unrelated proofs.

3) 本报告由必维科技服务(西安)有限公司的合作机构完成, 必维西安公司参与监督本测试项目。This report is completed by Bureau Veritas Technology Services (Xi'an) Co., LTD., and Bureau Veritas participated in the supervision of this test project.

编制人  
Prepared By:

刘航

签发人  
Approved By:



Bureau Veritas Science and Technology Service (Xi'an)  
Co., Ltd.  
必维科技服务(西安)有限公司  
Floor 1, 2, 3 and 8, North Building of Inspection and  
Testing Building, Wangxixi Street No. 787, Fengdong  
NewTown, Xi'an, Shaanxi Province  
陕西省西安市沣东新城王寺西街787号检验检测楼北楼1、  
2、3、8层  
Tel 029-68322100  
Web cps.bureauveritas.com

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

本报告受 <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> 发布之日发布的测试条件约束, 并通过引用纳入本报告, 仅供您使用。只有在事先得到我们的书面许可的情况下, 才允许向任何其他个人或实体复制或为其复制本报告, 或使用我们的名称或商标。本报告只阐述了我们对此处已确定的测试样品的调查结果。除非特别明确指出, 本报告中列出的结果并不表示或代表抽取测试样品的批次或任何类似或相同产品的质量或特性。我们的报告包括您要求的所有测试, 以及根据您提供给我们的信息得出的结果。测量的不确定性只有在认可测试的要求下才会提供。符合性声明是基于简单的验收标准, 不考虑测量不确定性, 除非另有书面要求。自本报告发布之日起, 贵方有 60 天的时间通知我们由于我们的疏忽造成的任何重大错误或遗漏, 或者如果您要求提供测量不确定性; 但是, 这种通知应是书面的, 并应具体说明贵方希望提出的问题。如果没有在规定的时间内提出这样的问题, 将构成您对本报告的完整性、所进行的测试和报告内容的正确性的无条件接受。



BUREAU  
VERITAS

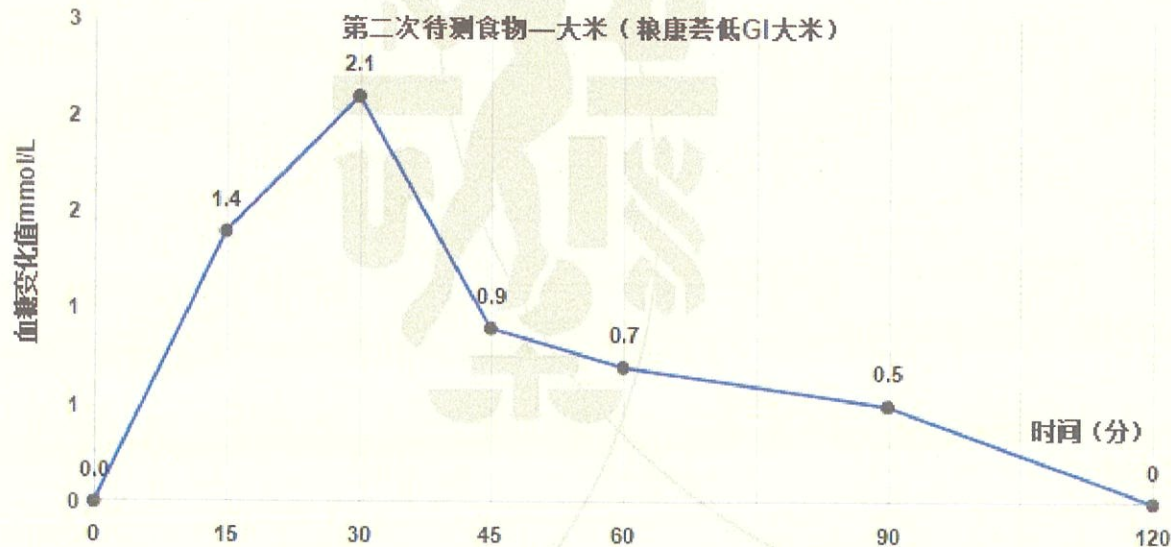
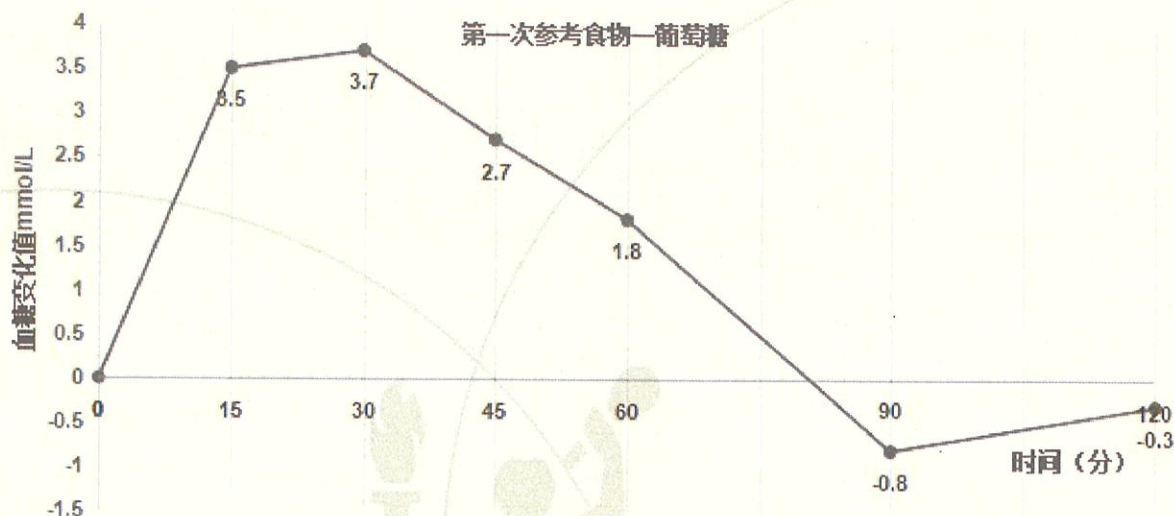
# 测试报告

## TESTING REPORT

报告编号 : 2401-GI-002  
REPORT No.  
页码 PAGE : 5 of 6

### 血糖应答曲线 Curve of Glycemic Response

某一受试者为例



Bureau Veritas Science and Technology Service (Xi'an)  
Co., Ltd.  
必维科技服务(西安)有限公司  
Floor 1, 2, 3 and 8, North Building of Inspection and  
Testing Building, Wangsisi Street No. 787, Fengdong  
New Town, Xi'an, Shaanxi Province  
陕西省西安市沣东新城王寺西街787号检验检测楼北楼1、  
2、3、8层  
Tel 029-68322100  
Web cps.bureauveritas.com

This report is governed by and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/>, and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

本报告受 <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> 发布之日发布的测试条件约束, 并通过引用纳入本报告, 仅供您使用。只有在事先得到我们的书面许可的情况下, 才允许向任何其他个人或实体复制或为其复制本报告, 或使用我们的名称或商标。本报告只阐述了我们对此处已确定的测试样本的调查结果。除非特别明确指出, 本报告中列出的结果并不表示或代表抽取测试样品的批次或任何类似或相同产品的质量或特性。我们的报告包括您要求的所有测试, 以及根据您提供给我们信息得出的结果。测量的不确定性只有在认可测试的要求下才会提供。符合性声明是基于简单的验收标准, 不考虑测量不确定性, 除非另有书面要求。自本报告发布之日起, 贵方有 60 天的时间通知我们由于我们的疏忽造成的任何重大错误或遗漏, 或者如果您要求提供测量不确定性; 但是, 这种通知应是书面的, 并应具体说明贵方希望提出的问题。如果没有在规定的时间内提出这样的问题, 将构成您对本报告的完整性、所进行的测试和报告内容的正确性的无条件接受。



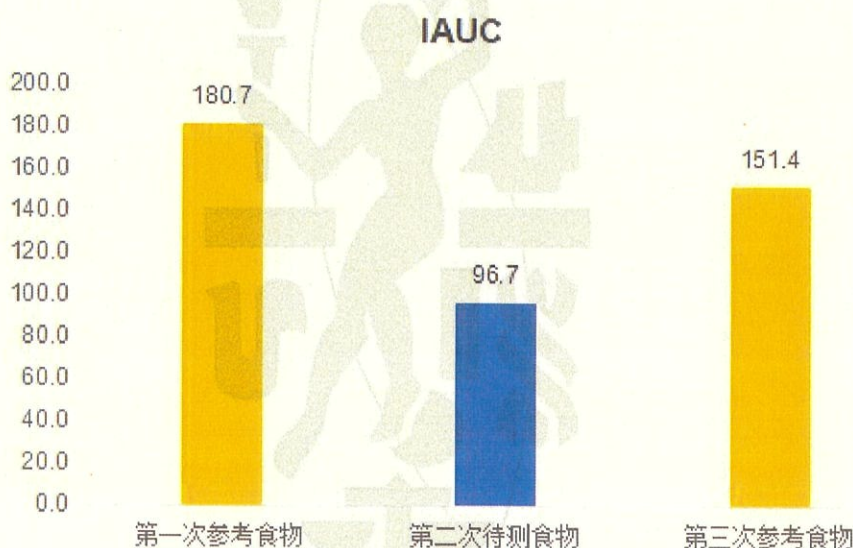
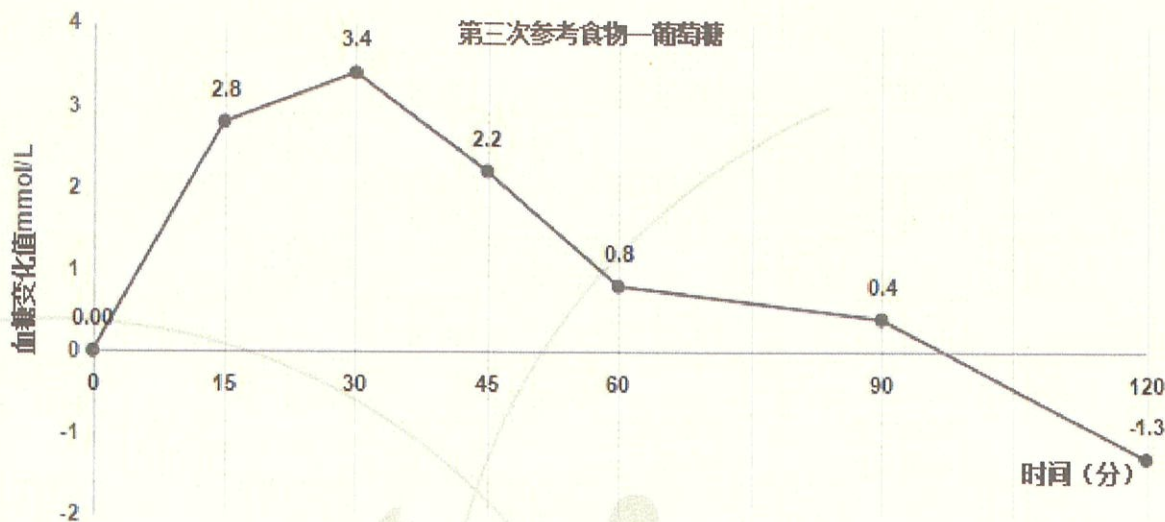


BUREAU  
VERITAS

# 测试报告

## TESTING REPORT

报告编号 : 2401-GI-002  
REPORT No.  
页码 PAGE : 6 of 6



Bureau Veritas Science and Technology Service (Xi'an)  
Co., Ltd  
必维科技服务(西安)有限公司  
Floor 1, 2, 3 and 8, North Building of Inspection and  
Testing Building, Wangsisi Street No. 787, Fengdong  
NewTown, Xi'an, Shaanxi Province  
陕西省西安市沣东新城王寺西街787号检验检测北楼1、  
2、3、8层  
Tel 029-68322100  
Web cps.bureauveritas.com

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

本报告受 <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> 发布之日发布的测试条件约束, 并通过引用纳入本报告, 仅供您使用。只有在事先得到我们的书面许可的情况下, 才允许向任何其他个人或实体复制或为其复制本报告, 或使用我们的名称或商标。本报告只阐述了我们对此处已确定的测试样本的调查结果。除非特别明确指出, 本报告中列出的结果并不表示或代表抽取测试样品的批次或任何类似或相同产品的质量或特性。我们的报告包括您要求的所有测试, 以及根据您提供给我们的信息得出的结果。测量的不确定性只有在认可测试的要求下才会提供。符合性声明是基于简单的验收标准, 不考虑测量不确定性, 除非另有书面要求。自本报告发布之日起, 贵方有 60 天的时间通知我们由于我们的疏忽造成的任何重大错误或遗漏, 或者如果您要求提供测量不确定度; 但是, 这种通知应是书面的, 并应具体说明贵方希望提出的问题。如果没有在规定的时间内提出这样的问题, 将构成您对本报告的完整性、所进行的测试和报告内容的正确性的无条件接受。