## **Resource Summary Report**

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# **SPINA Carb**

RRID:SCR\_026848 Type: Tool

#### **Proper Citation**

SPINA Carb (RRID:SCR\_026848)

#### **Resource Information**

URL: https://doi.org/10.5281/zenodo.15249620

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**Description:** Software tool to deliver estimated structure parameters of endocrine feedback control systems in vivo from serum or plasma hormone levels. Used for the evaluation of insulin-glucose homeostasis. Allows for calculating the secretory capacity of pancreatic beta cells (SPINA-GBeta), insulin receptor gain (SPINA-GR) and a static disposition index (SPINA-DI) from fasting concentrations of insulin and glucose. Additionally, HOMA, QUICKI and other calculated parameters are delivered as well. Binaries are available for macOS and Windows. For other operating systems, including Linux, Solaris and BSD, SPINA Carb is available as source code. Building from source requires Lazarus/Free Pascal. A special version of the calculation engine is available for modern S implementations, e.g. R.

Abbreviations: SPINA, SPINA Carb

**Synonyms:** Structure Parameter Inference Approach, Structure Parameter Inference Approach Carbohydrate Homeostasis

**Resource Type:** software resource, software application, data analytics software, standalone software

Defining Citation: PMID:36271244

**Keywords:** SPINA, SPINA Carb, secretory capacity evaluation, clinical calculator, Insulin, Glucose, Insulin-glucose homeostasis, prediabetes syndrome, insulin resistance

**Funding:** Ministry of Education (MOE) Singapore ; Open Access Publication Funds of the Ruhr-Universität Bochum ; Germany ; Project DEAL ; Deutsche Forschungsgemeinschaft (DFG) GRK 1041

Availability: Free, Available for download, Freely available

Resource Name: SPINA Carb

Resource ID: SCR\_026848

Record Creation Time: 20250426T055736+0000

Record Last Update: 20250521T062047+0000

### **Ratings and Alerts**

No rating or validation information has been found for SPINA Carb.

No alerts have been found for SPINA Carb.

## Data and Source Information

Source: <u>SciCrunch Registry</u>

## **Usage and Citation Metrics**

We have not found any literature mentions for this resource.