

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: standalone software, software resource, software application, data analytics 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

Alternate URLs: <https://spina.sourceforge.net>

Record Creation Time: 20250426T055736+0000

Record Last Update: 20260810T040920+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: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.