



(Re)FÜL

Fuel Smarter. Achieve More.

v 5.4

Nutrition and Hydration AI Adviser Data Field for GARMIN Devices

(Re)FÜL GARMIN DATAFIELD: SUMMARY

(Re)FÜL is a dynamic fueling adviser that utilizes AI technology to help you accurately fuel your running and cycling activities.

It tracks your energy expenditure, dynamic sweat rate and specific substrate utilization rates based on your custom User Settings. At regular intervals, (Re)FÜL advises you about both fluid and carbohydrate consumption to help you replenish what you need to stay within optimal performance levels. Your recommended consumption totals for Glycogen and Fluid Levels are displayed in real time, along with a fuel gauge indicator to provide a visual of the current carbohydrate and fluid stores available inside your body.

(Re)FÜL simplifies your changing nutrition needs during exercise so you can fuel smarter and achieve more.

COMPATIBLE DEVICES

The following devices are compatible with the (Re)FÜL data field:

FENIX

5S+, 5X, 5X+, 6pro, 6Spro, 6Xpro

EDGE

520+, 530, 820, 830, Explore, 1000, 1030

FORERUNNER

245M, 645M, 945

D2

Charlie, Delta

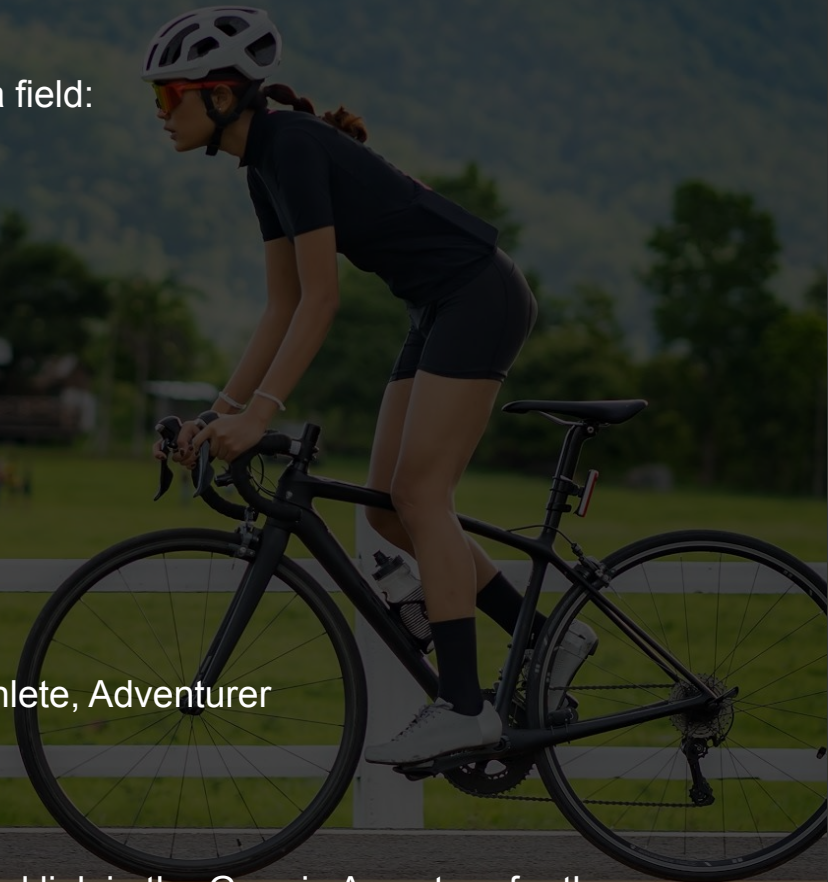
MARQ

Driver, Expedition, Driver, Commander, Captain, Aviator, Athlete, Adventurer

OTHER

DESCENT MK1 > OREGON 7XX > RINO 7XX DATA

*Be sure to check the compatible device tab on the download link in the Garmin App store for the most updated list of devices.



SCREEN LAYOUTS

Current options for data field assignment on compatible watch and rectangular devices:

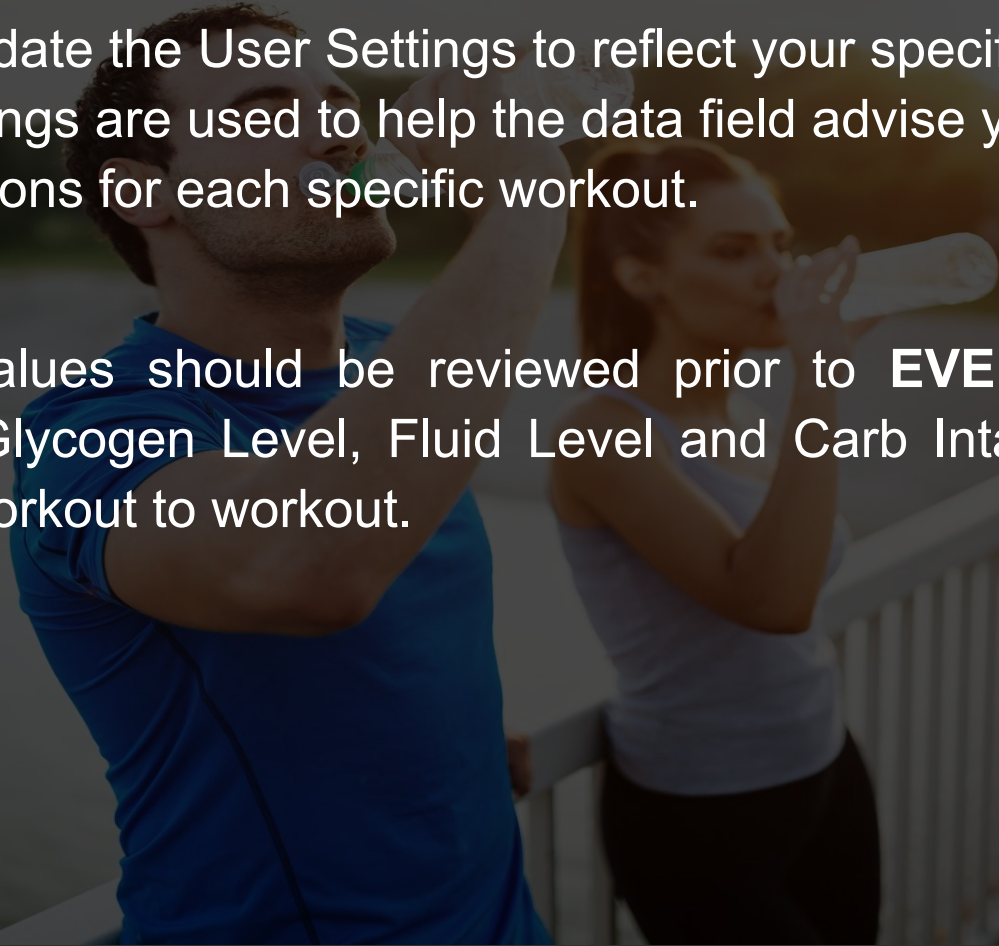
- The v4.9 data field is currently only visible in a full-width screen.
- On watch-type devices, the data field requires a full-width field. Most watches only allow up to two custom data fields. With a two-field capability, you may assign this data field to the top or bottom field. With a three-field capability watch, you may assign this data field to the middle field.
- On Edge Devices with a rectangular screen, the data field requires a full-width field. This allows you to assign up to eight additional metrics to your screen.



USER SETTINGS - GENERAL INFORMATION

You will want to update the User Settings to reflect your specific values. These settings are used to help the data field advise you on best fueling options for each specific workout.

Some of these values should be reviewed prior to **EVERY** workout as your Glycogen Level, Fluid Level and Carb Intake will change from workout to workout.



USER SETTINGS

Body Weight (lbs)

175

Alert Freq (mins)

5

Hydration Level

Okay:65%

Glycogen Level

Dieting:75%

Carb Intake

Maximum

Body Weight (lbs)

Used to determine % body weight lost from dehydration

Frequency of Nutrition Alerts (minutes)

How often the fluid and carb intake alerts is displayed

Hydration Level

Hydration status prior to the start of exercise. Further explanation below.

Glycogen Level

Level of your internal carbohydrate storage prior to the start of exercise. Further explanation below.

Carb Intake

Determines the amount of recommended carb intake during the fueling alert. Further explanation below.

USER SETTINGS CONTINUED...

Max Carbs/hr (gr)

Bottle Size (oz)

Sweat Rate (oz)

Max Fluids/hr (oz)

Auth Code

Max Carbs/hr (gr)

Max amount of carbs your body can absorb per hour in grams.

Bottle Size (oz)

Size bottle you use for fluid consumption during exercise.

Sweat Rate (oz)

Amount of sweat you estimate you'll lose per hour during this workout.

Fluid Absorption Rate (oz)

How many oz. of fluid your body can absorb per hour.

Authorization Code

(Re)FÜL is a monthly subscription. Contact cliff@bt-nutrition.com for details.

SETTING YOUR LEVELS - HYDRATION LEVEL

- The Hydration Level setting allows you to set your pre-exercise hydration status.
- The initial setting allows our proprietary AI Hydration Advisor to alert you to how much fluid to consume based on certain dynamic indicators.
- Our AI technology allows you to exercise at different intensities and in different environments without the worry of having to adjust your hydration plan.

Hydration Level

Saturated

Carb Capacity

Fastest-80%

Done

Saturated

Great

Okay

Poor

Parched

HYDRATION LEVELS EXPLAINED

Saturated - You were very mindful of your hydration over the 24 hours prior to your workout.

- Consumed about 1 oz. per lb. of bodyweight (BW)
- Urine is a very light yellow
- Specific gravity strip reads 1.010

Great - You did a fairly good job with your hydration over the 24 hours prior to your workout.

- Consumed about .75 oz. per lb of BW
- Urine is medium yellow but you can still see through it
- Possible slight thirst

Okay - You could have definitely done a better job with your hydration over the last 24 hours prior to your workout.

- Consumed about .5 oz. per lb. of BW
- Urine is yellow
- Consistently thirsty

Parched - You did not do a good job with hydration over the last 24 hours prior to your workout.

- Consumed about .25 oz. per lb. of BW
- Urine looks radioactive
- Very thirsty / dry mouth

Hydration Level

Okay:65%

Glycogen Level

Dieting:75%



Done

Saturated:100%

Great:85%

Okay:65%

Poor:40%

Parched:10%

GLYCOGEN LEVEL

The Tank Level is a proprietary option that allows you to estimate how much available energy in the form of stored carbohydrate you have to use during exercise. This setting should be adjusted as needed before each workout.

Fresh - Choose this setting if you are in a rested and well fed state.

Fasted - Choose this setting if you consume adequate calories but prefer to workout first thing in the morning before eating.

Dieting - Choose this setting if you restrict your caloric intake to lose body fat. Restriction refers to approximately 500 - 600 calories per day below your basal metabolic rate.

2nd WO - Choose this setting before your 2nd workout of the day, and for any subsequent workouts during that day.

Keto - Choose this setting if you adhere to a low-carb, keto-modified or keto diet. Best used when your carb consumption is 100 - 125 grams of carbohydrate or less per day.

Glycogen Level

Dieting:75%

Carb Intake

Maximum

^ v Done

Fresh:100%

Fasted:80%

Dieting:75%

2nd WO:50%

KETO:10%

USER SETTINGS - CARB INTAKE

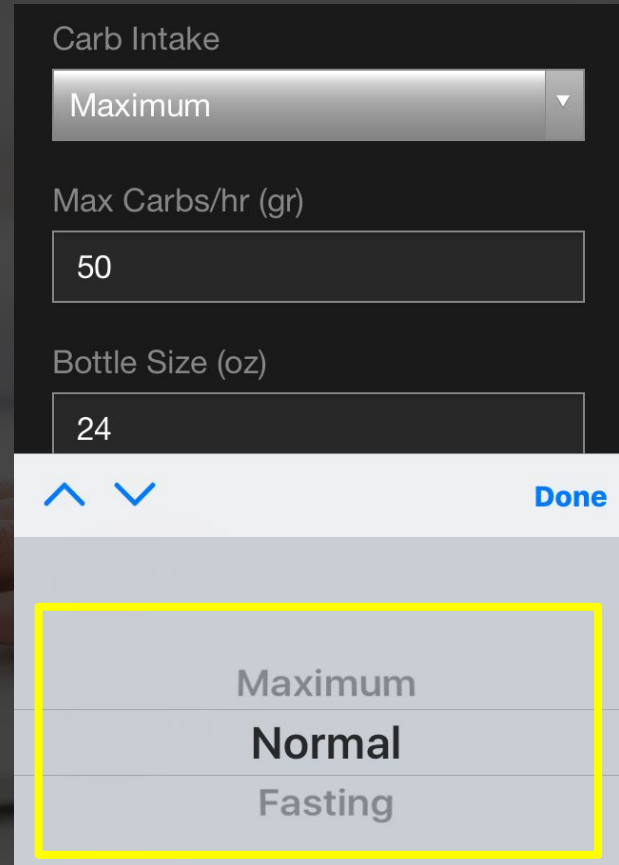
The Carb Intake is a metric used to help advise you on how much carbohydrate to consume during each fuel alert.

Maximum - use in heavy training blocks and during races. This setting will maximize your intake to expenditure ratio.

Normal - use for standard workouts. This setting will keep your carbohydrate levels in an optimal range.

Fasting - use for easier workouts when fueling is not needed or when you are looking to utilize stored energy during your workout.

*Note - This setting will result in zero carbs being advised during the scheduled alert.



The screenshot shows the 'Carb Intake' settings interface. At the top, the title 'Carb Intake' is displayed. Below it is a dropdown menu currently set to 'Maximum'. Underneath are two input fields: 'Max Carbs/hr (gr)' with the value '50' and 'Bottle Size (oz)' with the value '24'. At the bottom, a white dropdown menu is open, showing three options: 'Maximum', 'Normal', and 'Fasting'. The 'Maximum' option is highlighted with a yellow border. The interface includes a 'Done' button in the top right corner of the dropdown menu and navigation arrows (up and down) on the left side.

Carb Intake

Maximum

Max Carbs/hr (gr)

50

Bottle Size (oz)

24

Done

Maximum

Normal

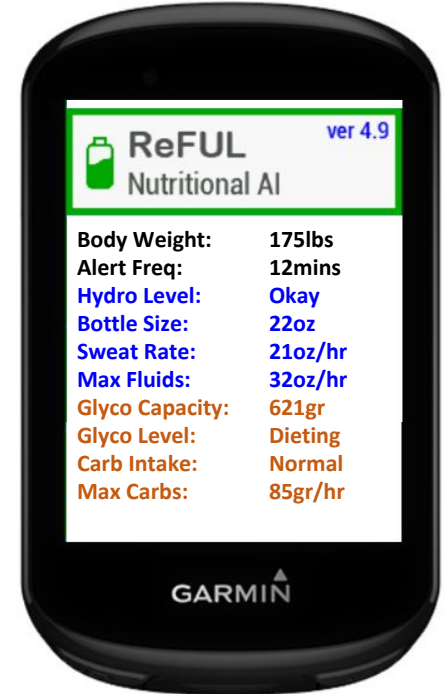
Fasting

SPLASH SCREEN

The Splash Screen is displayed once you initiate your activity on your Garmin device if you have properly assigned the data field to the activity.

This screen provides the version of the data field you are using. If you are using an Edge device and assign the data field to a full screen, you will be provided with additional information.

For watches Edge devices used inside, the field is activated once you press the start button. For Edge devices used outside, the field is activated once you begin moving.



PRIMARY SCREEN

Once your activity starts, you will see the primary screen. This screen serves as your dashboard and prepares you for your next fueling session. This screen provides a running total of how many bottles of fluid and how many grams of carbs you should have consumed up to that time of exercise.

Once your glycogen levels and/or body fluid levels get low, performance can be impacted. In most cases, when you adjust your settings properly and follow the suggestions, your intake will be optimal and help you perform at your expected level.



PRIMARY SCREEN CONTINUED...

CARBS(g) = Grams of carbs you should have consumed up to this point. The bar graph represents your body's approximate internal glycogen level. The color will change from Green (good) to Red (bad) based on user settings and expenditure.

BOTTLES = Number of bottles you should have consumed up to this point. The graph represents your body's approximate internal fluid level. The color will change from Blue (good) to Red (bad) based on user settings and expenditure.

9:49 = Time until your next scheduled fueling.



ALERT SCREEN

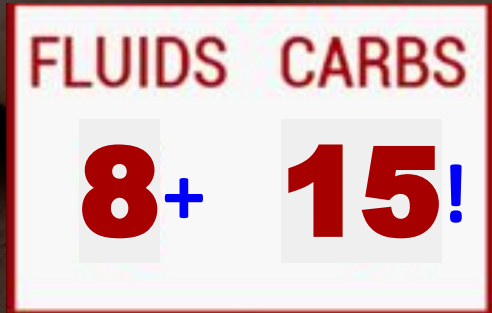
The Alert Screen provides scheduled nutritional advice in regards to how much fluid and carbohydrate you should consume. The Alert Screen is denoted with red text and beeps to remind you to look down. The Alert Screen stays visible for 10 seconds. Symbols may accompany your recommendation. These symbols represent which dynamic fueling mode (Re)FÜL suggests based on your needs.

FLUIDS - Amount of fluid to consume

- **No Symbol** = Normal consumption mode
- **+** = Catch up consumption mode
- **!** = You are sweating more than you can consume

CARBS - Amount of carbs to consume

- **-0-** = Fasting mode
- **No Symbol** = Normal consumption mode
- **!** = You are burning more carbs than you can consume
- **+** = Fasted override mode

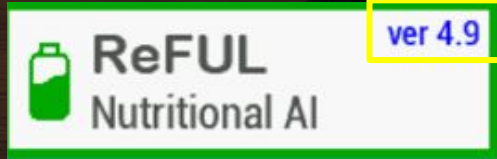


In certain conditions you might miss this alert. The primary screen always gives you your total bottle count and your total carb intake in grams so that you can keep yourself replenished properly.

UPDATES

The current downloaded version of your data field is displayed on the splash screen. You can check this version against the current version on the Garmin app store. >

When an update is available, there will be a notification in the data field section of your Garmin Connect. To update the field to the most current version, you need to connect your device to your phone or computer and perform the update do through Garmin Connect. Once the data field is current, it will move up to the installed section in your data field settings in Garmin Connect.



UPDATE AVAILABLE



ReFUL Nutritional AI Adviser >

NOT INSTALLED

No removed activities or apps.

INSTALLED



ReFUL Nutritional AI Adviser >

NOT INSTALLED

No removed activities or apps.



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