# Package 'hemat'

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**Type** Package

**Title** Hematimetric Indices Calculator

**Version** 1.1.3

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**Description** Tools to calculate Mean Corpuscular Volume, Mean Corpuscular Hemoglobin, and Mean Corpuscular Hemoglobin Concentration, which are essential for assessing red blood cell health and diagnosing blood disorders.

**License** GPL (>= 2)

**Suggests** testthat (>= 3.3.1)

**Encoding** UTF-8

**RoxygenNote** 7.3.3

**NeedsCompilation** no

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**Repository** CRAN

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## Contents

## calc_mch *Calculate Mean Corpuscular Hemoglobin (MCH)*

### Description

Calculates the MCH based on hemoglobin concentration and red blood cell count. MCH measures the average amount of hemoglobin per red blood cell.

### Usage

```
calc_mch(hb, rb)
```

### Arguments

| | |
|---|---|
| hb | Numeric value representing the hemoglobin concentration in g/dL. |
| rb | Numeric value representing the red blood cell count (millions/ µL). |

### Value

Numeric value representing the MCH in picograms (pg).

### Examples

```
calc_mch(15, 5)
```

## calc_mchc *Calculate Mean Corpuscular Hemoglobin Concentration (MCHC)*

### Description

Calculates the MCHC based on hemoglobin concentration and hematocrit. MCHC measures the average concentration of hemoglobin in red blood cells.

### Usage

```
calc_mchc(hb, ht)
```

### Arguments

| | |
|---|---|
| hb | Numeric value representing the hemoglobin concentration in g/dL. |
| ht | Numeric value representing the hematocrit in percentage. |

### Value

Numeric value representing the MCHC in grams per deciliter (g/dL).

## Examples

```
calc_mchc(15, 40)
```

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`calc_mcv` *Calculate Mean Corpuscular Volume (MCV)*

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## Description

MCV measures the average volume of red blood cells in a blood sample.

## Usage

```
calc_mcv(ht, rb)
```

## Arguments

| | |
|---|---|
| `ht` | Numeric value representing the hematocrit in percentage. |
| `rb` | Numeric value representing the red blood cell count (millions/ μL). |

## Value

Numeric value representing the MCV in femtoliters (fL).

## Examples

```
calc_mcv(40, 5)
```

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