



## Free Testosterone & Bioavailable Testosterone Worksheet Calculators

Comparison of Results of (3) On-Line Calculators for FTc & BT vs. Results using SmartLabTools™ FTc & BT Worksheet Calculators

Templates: SLT\_430, SLT\_431 SLT\_432

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## Comments:

The following illustrates agreement of results between the 3 on-line calculators and with the 3 SmartLabTools™ calculator worksheets.

**PAY ATTENTION TO THE UNITS:** The units of measurement & units for reporting vary within the industry and are accommodated with dropdown boxes for some of the on-line calculators.

Three SLT calculators were developed to accommodate most common units of measurement and units being reported.

User validation of the SLT calculator worksheets should include results for the 3 variables (albumin, Total Testosterone, and SHBG) spanning their reportable ranges vs. comparison with on-line calculators as illustrated.

## Free & Bioavailable Testosterone Calculator

[ISSAM Web Link](#)

12/18/16 By:

### SLT 430 Example


[Clear Form Contents](#)

Seq #	Accession Number	Patient Name	Alb. g/dL	SHBG nmol/L	Testost. ng/dL	Free Testo. ng/dL	Free Testo. % of Total	Bioavail. ng/dL	Bioavail. % of Total
1	10001	Test Patient	4.3	150	900	6.15	0.68	144.0	16.0

### Free & Bioavailable Testosterone calculator

These calculated parameters more accurately reflect the level of bioactive testosterone than SHBG) and weakly bound to nonspecific proteins such as albumin. The SHBG-bound frac

Albumin  g/dL  [Explanat](#)

SHBG  nmol/L

Testosterone  ng/dL

Free Testosterone

Bioavailable Testosterone

**Disclaimer:** Results from this calculator should NOT be solely relied upon in making any given purpose.

**WARNING!** The calculated free and bioavailable testosterone are reliable in most cases (e.g. transdermal DHT, oral testosterone) or mesterolone

*This calculator was developed at the Hormonology department, University Hospital of Ghent*

*Click on Image for Link to Website*

[Home](#) | [Testosterone Conversion](#) | [Free Testosterone Calculator](#) | [Testosterone Management Tools](#)

### Free Testosterone Calculator

Here you can easily calculate the bioactive testosterone circulating in plasma by using our testosterone parameters more accurately reflect the level of bioactive testosterone than the sole measurement of

Enter the arithmetic units into the fields below to calculate the testosterone

Albumin:\*\*  g/dL

SHBG:\*\*  nmol/L

Testosterone:\*\*  ng/dL

Free Testosterone

Bioavailable Testosterone

*Click on Image for Link to Website*

## Free & Bioavailable Testosterone Calculator

SLT\_431 Example


[ISSAM Web Link](#)

12/18/2016 By:

Seq #	Accession Number	Patient Name	Alb. g/dL	SHBG nmol/L	T. Testosterone ng/dL	Reset	Free Testosterone pg/mL	Free Testosterone % of Total	Bioavailable Testosterone ng/dL	Bioavailable Testosterone % of Total
1	10001	Test Patient	4.3	150	900		61.5	0.68	144	16.0

### The Siemens Calculator

- uses g/L units for Albumin
- includes Androgen Index

SLT\_431 for reporting TT in **ng/dL** and Free T in **pg/mL**

### Testosterone and SHBG

Mass Input for TT

#### Data Entry

 Total Testosterone:  ng/dL

 SHBG:  nmol/L

 Albumin (default = 43):  g/L




#### Data Results

 Free Androgen Index: 

 Free Testosterone\* (cFT):  pg/mL  % of Total

 Bioavailable Testosterone:  ng/dL  % of Total

\* This software is intended to facilitate calculation of 'free' and 'bioavailable' testosterone estimates, yielding results in accord with Vermeulen et al., JCEM 1999;84:3666, and with the ISSAM calculator. Siemens Healthcare Diagnostics (SHD) makes no claims as to the clinical utility or relative value of these derived measures. Results obtained with this software are intended for use only by qualified healthcare professionals, taking into account all relevant patient data in accordance with best medical practices. The use of this calculator is subject to the license on the distribution CD, cat. no. ZS1383CD.

*Click on Image for Link to Website*



## Free & BioAvailable Testosterone Calculator

[ISSAM Web Link](#)

12/18/2016 By:

**SLT\_432 Example**

[Clear Form Contents](#)

#	Accession Number	Patient Name	Alb. g/dL	SHBG nmol/L	Testost. ng/mL	Free (calc) pg/mL	Free (calc) % of Total	Bioavail. ng/dL	Bioavail. % of Total
1	10001	Test Patient	4.3	150	9.00	61.5	0.68	144	16.0

### The Siemens Calculator

- uses g/L units for Albumin
- includes Androgen Index

SLT\_432 for reporting TT in **ng/mL** and Free T in **pg/mL**

### Testosterone and SHBG

Mass Input for TT

#### Data Entry

Total Testosterone:  ng/dL

SHBG:  nmol/L

Albumin (default = 43):  g/L




#### Data Results

Free Androgen Index:

Free Testosterone\* (cFT):  pg/mL     % of Total

Bioavailable Testosterone:  ng/dL     % of Total

\* This software is intended to facilitate calculation of 'free' and 'bioavailable' testosterone estimates, yielding results in accord with Vermeulen et al., JCEM 1999;84:3666, and with the ISSAM calculator. Siemens Healthcare Diagnostics (SHD) makes no claims as to the clinical utility or relative value of these derived measures. Results obtained with this software are intended for use only by qualified healthcare professionals, taking into account all relevant patient data in accordance with best medical practices. The use of this calculator is subject to the license on the distribution CD, cat. no. ZS1383CD.

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**END**