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Introduction

BodyComp 96 is a shareware program designed to facilitate the calculation of body fat percentage, body mass index, waist to hip ratio, and body surface area. The program allows the user to choose from a variety of equations and to print informative data sheets.

Determining Body Fat Percentage

To calculate body fat percentage, follow these steps:

Enter subject information. The only fields that require an entry are weight, age, and gender.

Pick the equation you wish to use. If the Jackson & Pollock 4-site equation is selected, the drop down list containing body density to body fat equations is disabled and not needed.

Enter the skinfold measurements. Only the sites specific to the selected equation are enabled.

Click on the 'Analyze' button. The results for body fat percentage, lean body mass, and adipose weight will be given. To clear all data fields, click on the 'New Subject' button.

Determining Waist to Hip Ratio

To calculate waist to hip ratio, follow these steps:

To display waist to hip ratio form, click on the 'WH' icon on the toolbar (Win95) or click on 'Waist to Hip Ratio' from the 'Other Measures' menu.

Enter the required information in the appropriate units.

Click on the 'Analyze' button.

Determining Body Surface Area

To calculate body surface area, follow these steps:

To display body surface area form, click on the 'BSA' icon on the toolbar (Win95) or click on 'Body Surface Area' from the 'Other Measures' menu.

Enter the required information in the appropriate units and choose the desired equation.

Click on the 'Analyze' button.

Site Descriptions

Anatomical site descriptions are available for all listed sites. Simply click on 'Site Descriptions" from the 'Information" menu and select the desired site.

Printing Data

To print data click on the printer icon on the toolbar (Win95) or click on 'Print' from the 'File' menu.

A data sheet will be printed containing all the inputed data.

Important note: In order to print the body mass index, waist to hip ratio, or body surface area, these windows (forms) must be open or minimized in order for the data to print on the data sheet. If these windows are closed, the data will not show up on the data sheet

Saving Data

BodyComp 96 allows the user to save the information of the forms as a text (txt) file that can be imported into any word processing application.

To save a data file click on the save icon on the toolbar (Win95) or click on 'Save As' from the 'File' menu.

If you choose to save the file under a name that already exists, BodyComp 96 will add the new information to the bottom of the existing file. This is very useful for creating logs of subject's information.

Important note: In order to save the body mass index, waist to hip ratio, or body surface area information, these windows (forms) must be open or minimized. If these windows are closed, this information will be blank in the text data file.

References for Body Fat Equations

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Jackson & Pollock 7-site (male and female)
Jackson & Pollock 4-site (male and female)
Jackson & Pollock 3-site (C,T,SS) (male)
Jackson & Pollock 3-site (T,A,TH) (male)
Jackson & Pollock 3-site (T,SI,TH) (female)
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Jackson, A.S., Pollock, M.L. Practical assessment of body composition. Physician Sport. Med. 13: 76-90,1985.

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Pollock, M.L., Schmidt, D.H., and Jackson, A.S. Measurement of cardiorespiratory fitness and body composition in the clinical setting. Comprehensive Therapy. 6(9): 12-17, 1980.

Brozek

Brozek, J., Grande, F., Anderson, T., and Keys, A. Densitometric analysis of body composition; revision of some quantitative assumptions. Ann. N.Y. Acad. Sci. 110: 113-140, 1963.

Siri

Siri, W.E. Body composition from fluid spaces and density. In Brozek, J. and Henschel, A., editors: Techniques for Measuring Body Composition. Washington, D.C., National Academy of Science, 223-244, 1961.

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Lohman, T.G. Research progress in validation of laboratory methods of assessing body composition. Medicine and Science in Sports and Exercise. 16: 596-603, 1984.

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Westrate, J.A., and Deurenberg, P. Body composition in children, proposal for a method for calculating body fat percentage from total body density or skinfold thickness measurements. American Journal of Clinical Nutrition. 50: 1104-1115, 1989.

Other References

Body Mass Index

American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription 5th Edition. Baltimore: Williams and Wilkins, 1985

Jaequier, E. Energy, obesity, and body weight standards. American Journal of Clinical Nutrition. 45: 1035-1047, 1987.

Waist to Hip Ratio

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Bray, G.A., and Gray, D.S. Obesity. Part 1-Pathogenesis. Western Journal of Medicine. 149: 429-441, 1988.

Body Surface Area

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Haycock, G.B., Chir, B., Schwartz, G.J. and Wisotsky, D. Geometric mehtod for measuring body surface area: A height-weight formula validated for infants, children and adults. Journal of Pediatrics. 93: 62-66, 1978.

Registering BodyComp 96

BodyComp 96 is a shareware program. If you find the program usefull, please support the shareware concept and register the software. This allows for development of future versions of the program.

To register the software, please send a check or money order for \$10.00 (US) to:

Chris Cheatham 1707 N. Glenwood Ave. #6 Muncie, IN 47304

Determining Body Mass Index

To calculate body mass index, follow these steps:

To display body mass index form, click on the 'BMI' icon on the toolbar (Win95) or click on 'Body Mass Index' from the 'Other Measures' menu.

Enter the required information in the appropriate units.

Click on the 'Analyze' button.