

IL TRATTAMENTO NUTRIZIONALE DELLO SCOMPENSO CARDIACO

Giorgio Bedogni

Obiettivo

- Discutere la base di evidenza disponibile per il trattamento nutrizionale dello scompenso cardiaco e la sua implementazione in forma di linee guida per la pratica professionale (Academy of Nutrition and Dietetics, AND ex American Dietetic Association, ADA)

Cosa è lo scompenso cardiaco ?



2009 Focused Update: ACCF/AHA Guidelines for the Diagnosis and Management of Heart Failure in Adults : A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines: Developed in Collaboration With the International Society for Heart and Lung Transplantation
2009 WRITING GROUP TO REVIEW NEW EVIDENCE AND UPDATE THE 2005 GUIDELINE FOR THE MANAGEMENT OF PATIENTS WITH CHRONIC HEART FAILURE WRITING ON BEHALF OF THE 2005 HEART FAILURE WRITING COMMITTEE, Mariell Jessup, William T. Abraham, Donald E. Casey, Arthur M. Feldman, Gary S. Francis, Theodore G. Ganiats, Marvin A. Konstam, Donna M. Mancini, Peter S. Rahko, Marc A. Silver, Lynne Warner Stevenson and Clyde W. Yancy

Circulation. 2009;119:1977-2016; originally published online March 26, 2009;
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Cosa è lo scompenso cardiaco ?

- Definizione
 - Sindrome da alterata funzione ventricolare
- Prevalenza (USA)
 - 2% 40-59 anni; 5% 60-69 anni; > 10% > 70 anni
- Cause
 - Cardiopatia ischemica, cardiopatia ipertensiva (...)

Hunt SA *et al.* *Circulation* 2009;**119**:1977.

<http://www.nhlbi.nih.gov>

Cosa è lo scompenso cardiaco ?

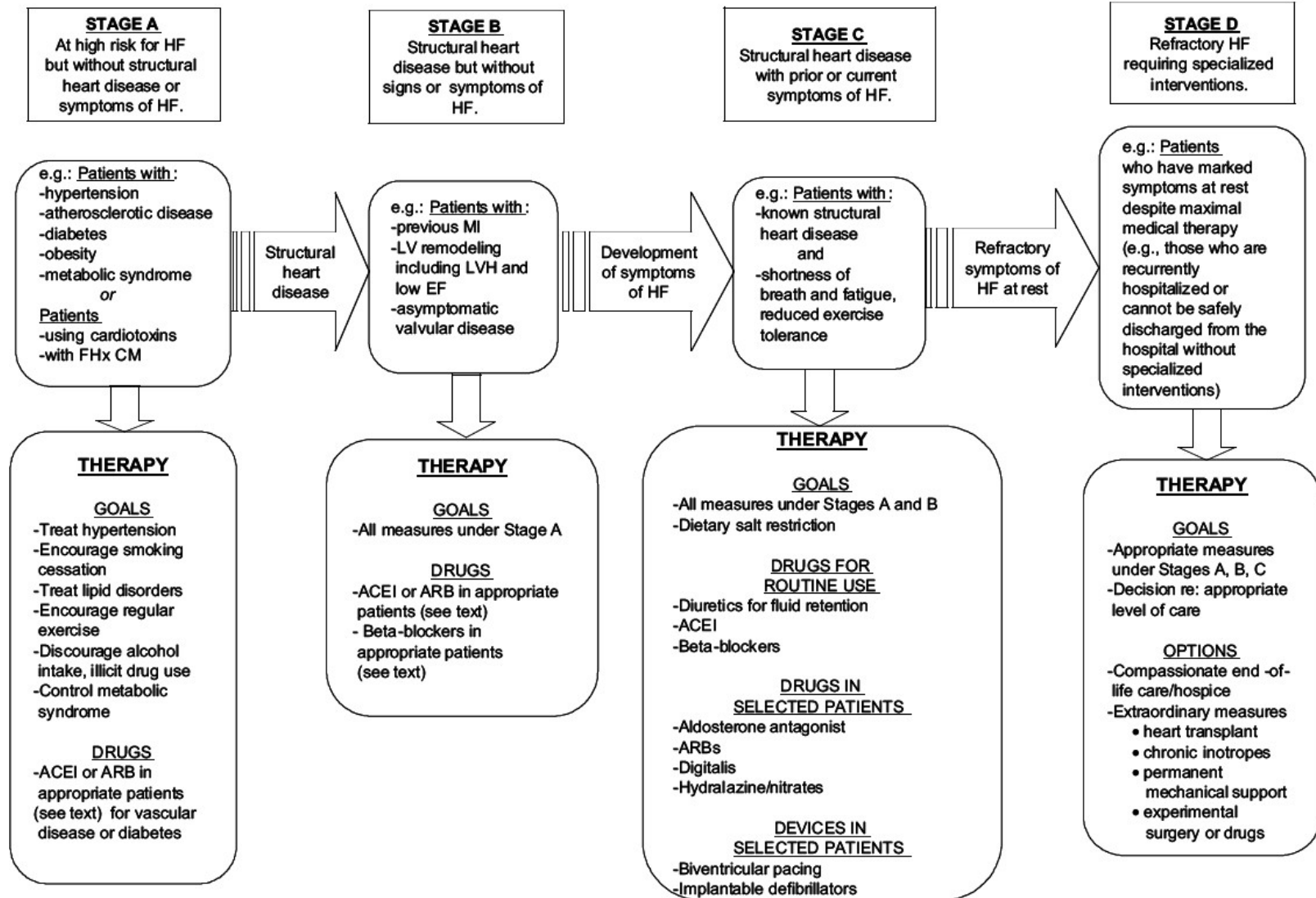
- Sintomi
 - Dispnea, fatica ed idroritenzione (...)
- Prognosi
 - Compromissione funzionale variabile
 - Mortalità elevata (2/3 a 5 anni dalla diagnosi)

Hunt SA *et al.* *Circulation* 2009;**119**:1977.

<http://www.nhlbi.nih.gov>

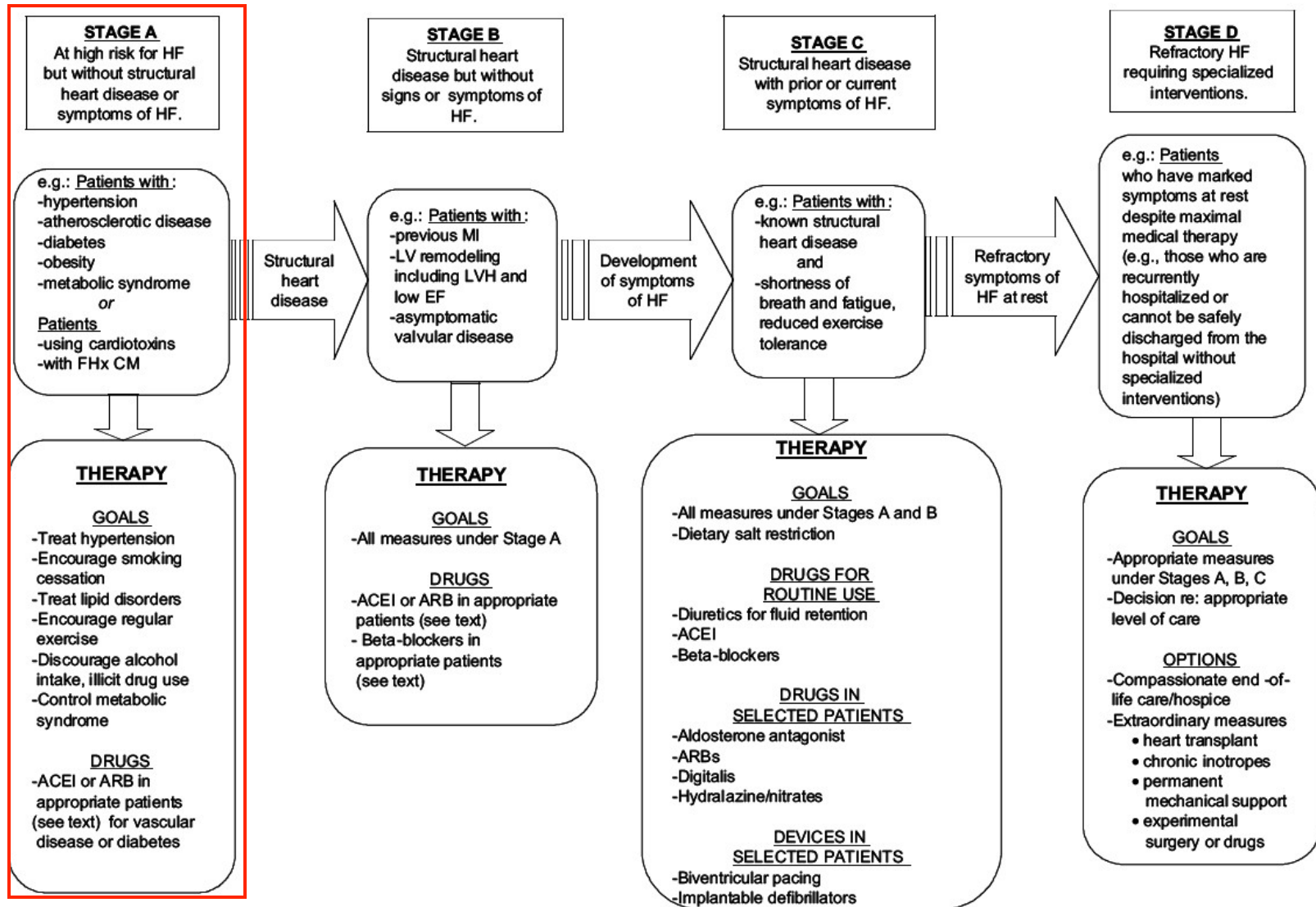
At Risk for Heart Failure

Heart Failure



At Risk for Heart Failure

Heart Failure



Stadio A e abitudini di vita

- Trattare ipertensione
- Trattare dislipidemia
- Trattare diabete
- Incoraggiare sospensione fumo
- Incoraggiare attività fisica
- Scoraggiare consumo di alcool
- Controllare la sindrome metabolica

Stadio A e abitudini di vita

- “... should be controlled according to contemporary guidelines”.

Hunt SA *et al. Circulation* 2009;**119**:1977.

Stadio A e abitudini di vita

- Trattare ipertensione
- Trattare dislipidemia
- Trattare diabete
- Incoraggiare sospensione fumo
- *Incoraggiare attività fisica*
- Scoraggiare consumo di alcool
- Controllare la sindrome metabolica

Attività fisica

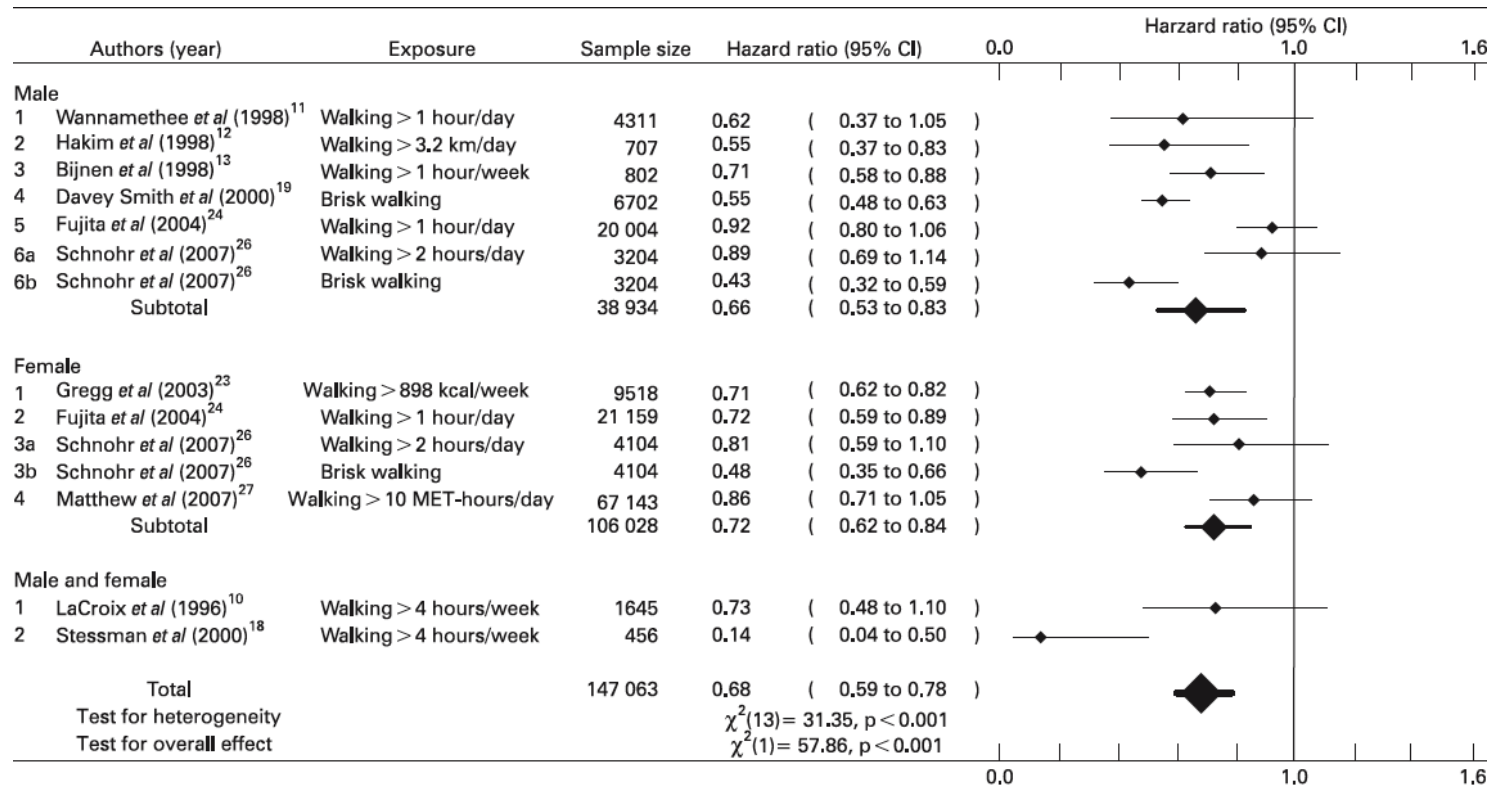


Figure 2 The association between walking and all-cause mortality in men and women. The referent group refers to the lowest walking (volume/intensity) group and hazard ratios of less than 1.0 suggest benefits of walking. MET, metabolic equivalent.

Hamer M *et al. Br J Sports Med* 2008;42:238 (systematic review of cohort studies).

Attività fisica

“Physical activity decreased all-cause mortality in patients with coronary heart disease (odds ratio = 0.73, 95% confidence interval 0.54 to 0.98)”

Karmisholt K. *Dan Med Bull* 2005;**52**:90 (systematic review of randomized controlled trials).

Stadio A e abitudini di vita

- Trattare ipertensione
- Trattare dislipidemia
- Trattare diabete
- Incoraggiare sospensione fumo
- Incoraggiare attività fisica
- *Scoraggiare consumo di alcool*
- Controllare la sindrome metabolica

Alcool

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STATE-OF-THE-ART PAPER

Alcohol and Cardiovascular Health

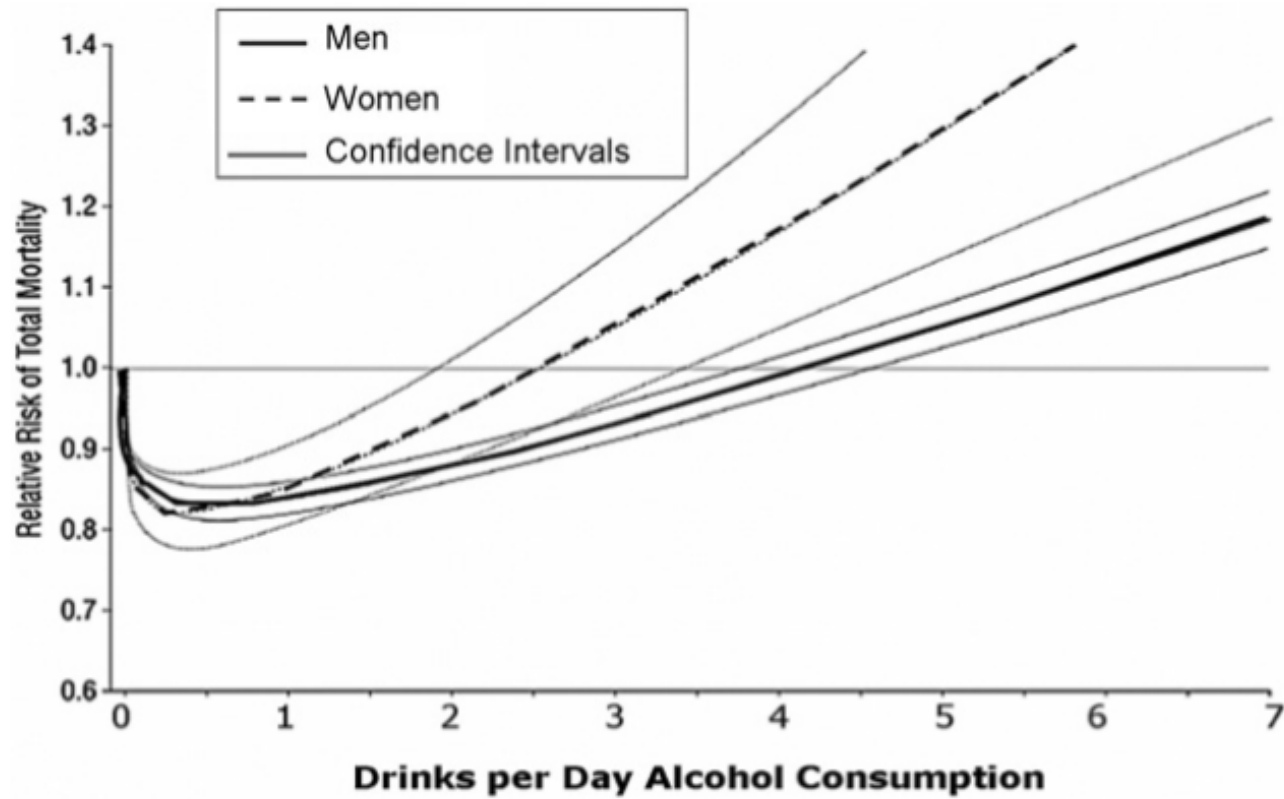
The Razor-Sharp Double-Edged Sword

James H. O'Keefe, MD, FACC,* Kevin A. Bybee, MD,* Carl J. Lavie, MD, FACC†

Kansas City, Missouri; and New Orleans, Louisiana

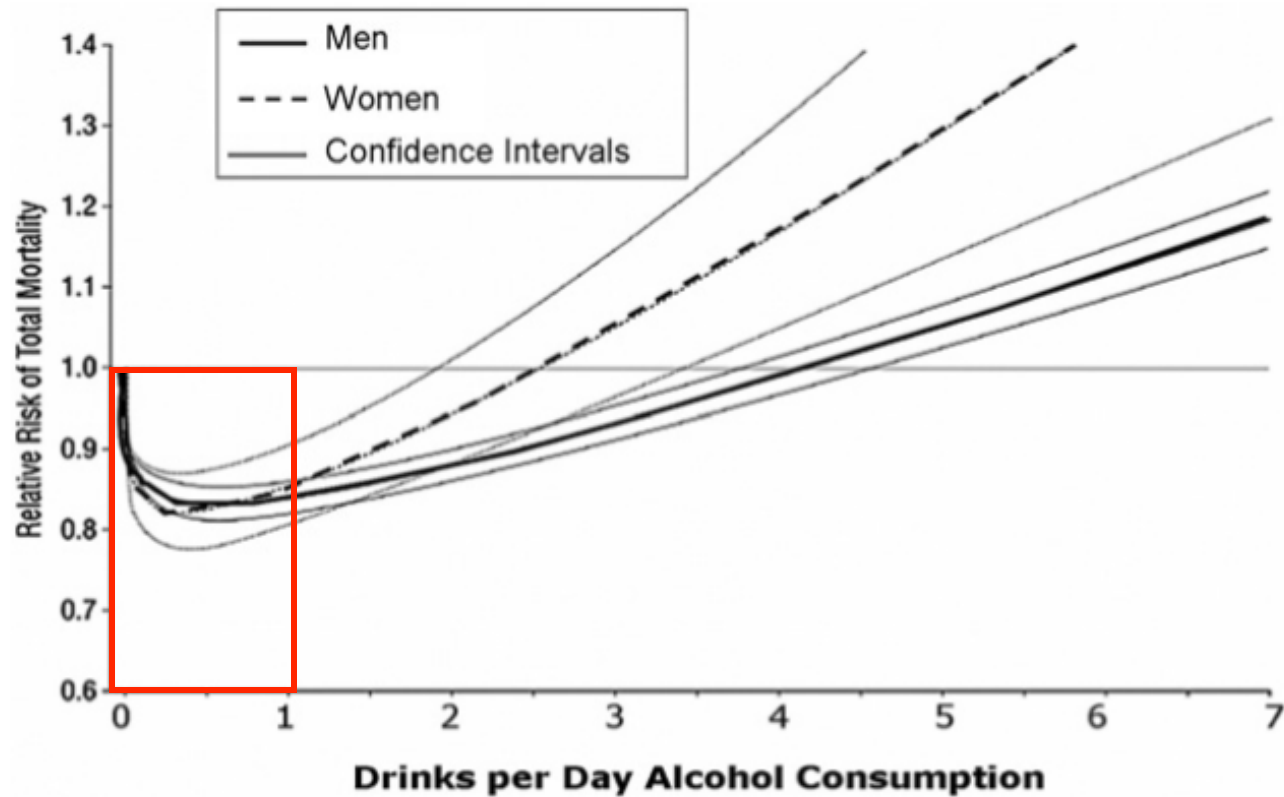
O'Keefe *et al.* *J Am Coll Cardiol* 2007;50:1009.

Alcool

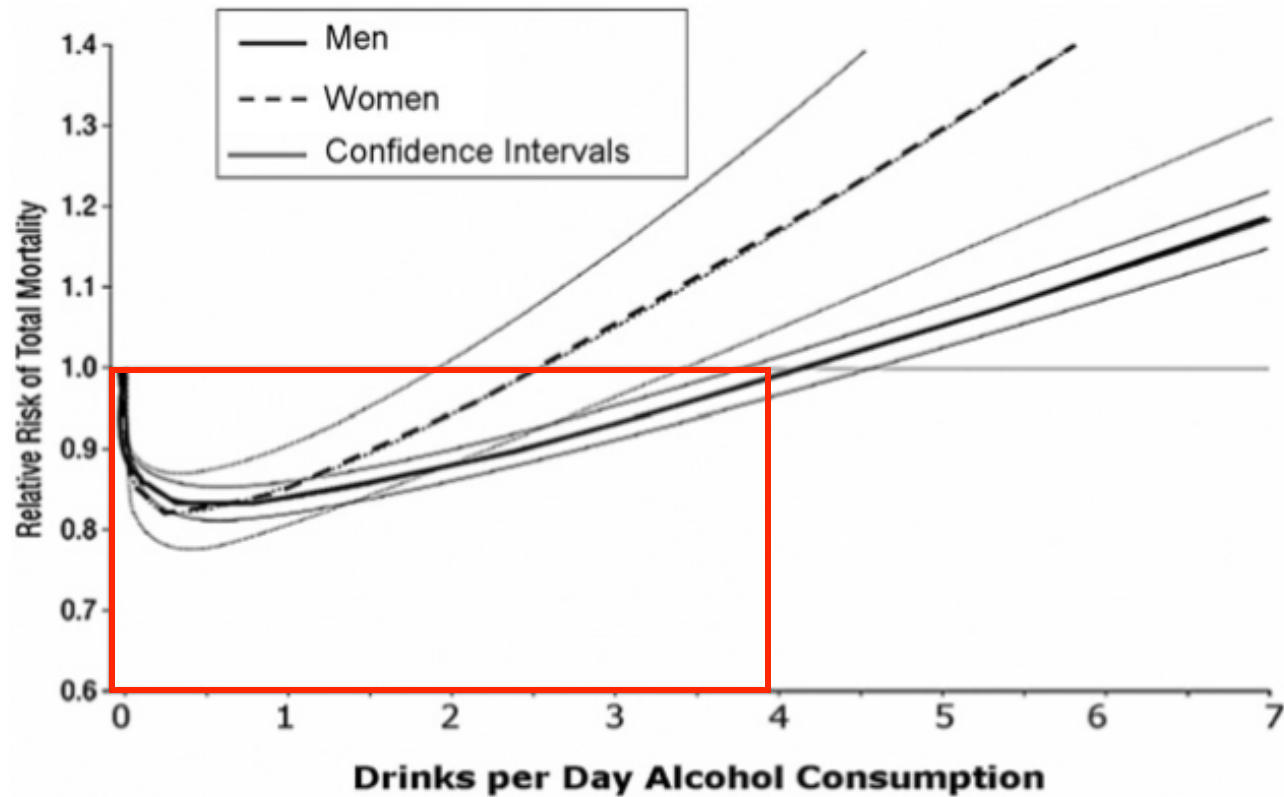


O'Keefe et al. *J Am Coll Cardiol* 2007;50:1009.
www.giorgiobedogni.it

Alcohol



Alcool



Alcool

- “Until we have more randomized outcome data, *and tools for predicting susceptibility to problem drinking*, it would seem prudent to encourage physicians and patients to focus on more innocuous interventions to prevent CHD”

O’Keefe *et al.* *J Am Coll Cardiol* 2007;50:1009.

Alcool



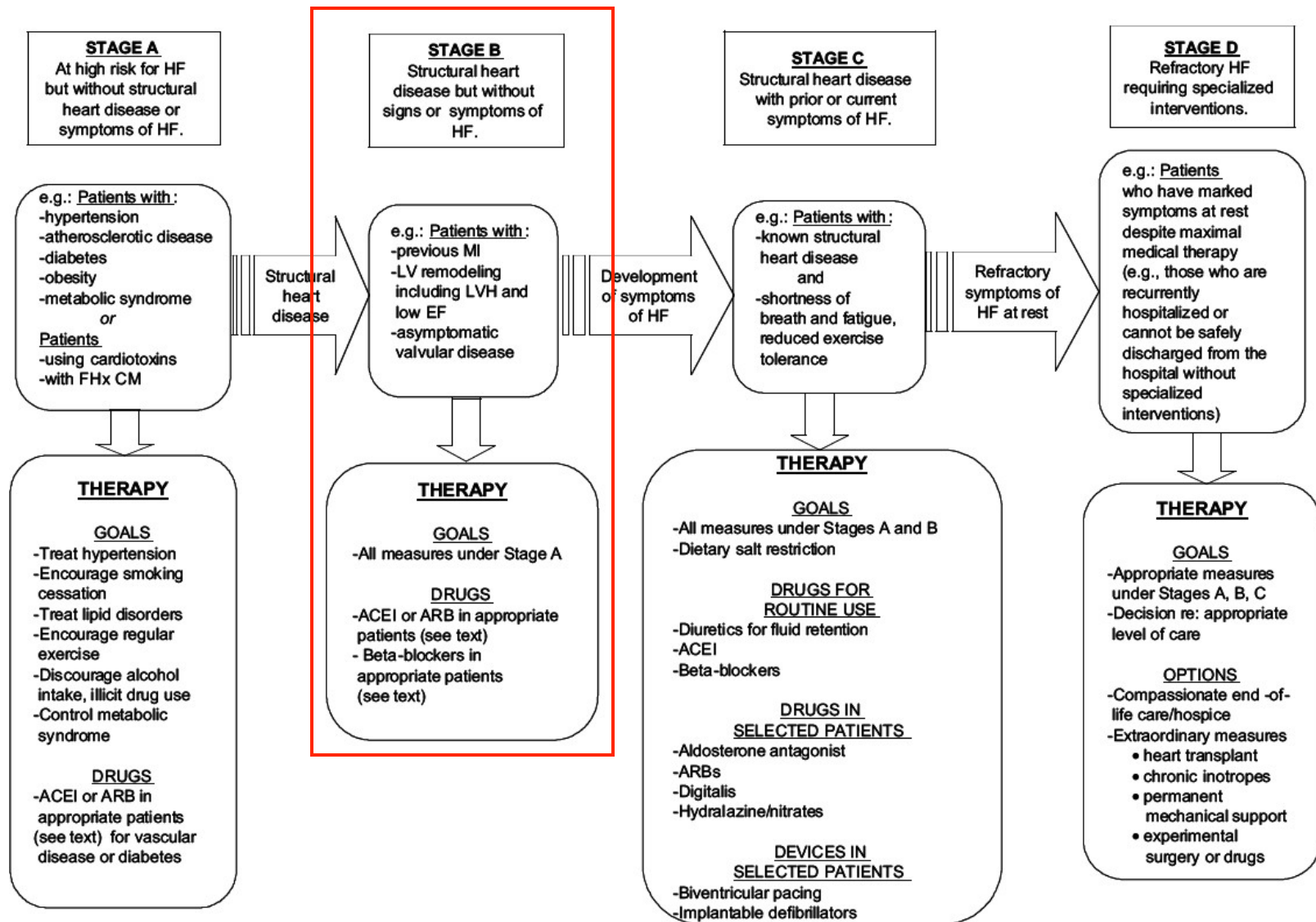
ALCOHOL CONFUSION

What is a unit?

Seabrook R *BMJ* 2007;17;335:1008.

At Risk for Heart Failure

Heart Failure

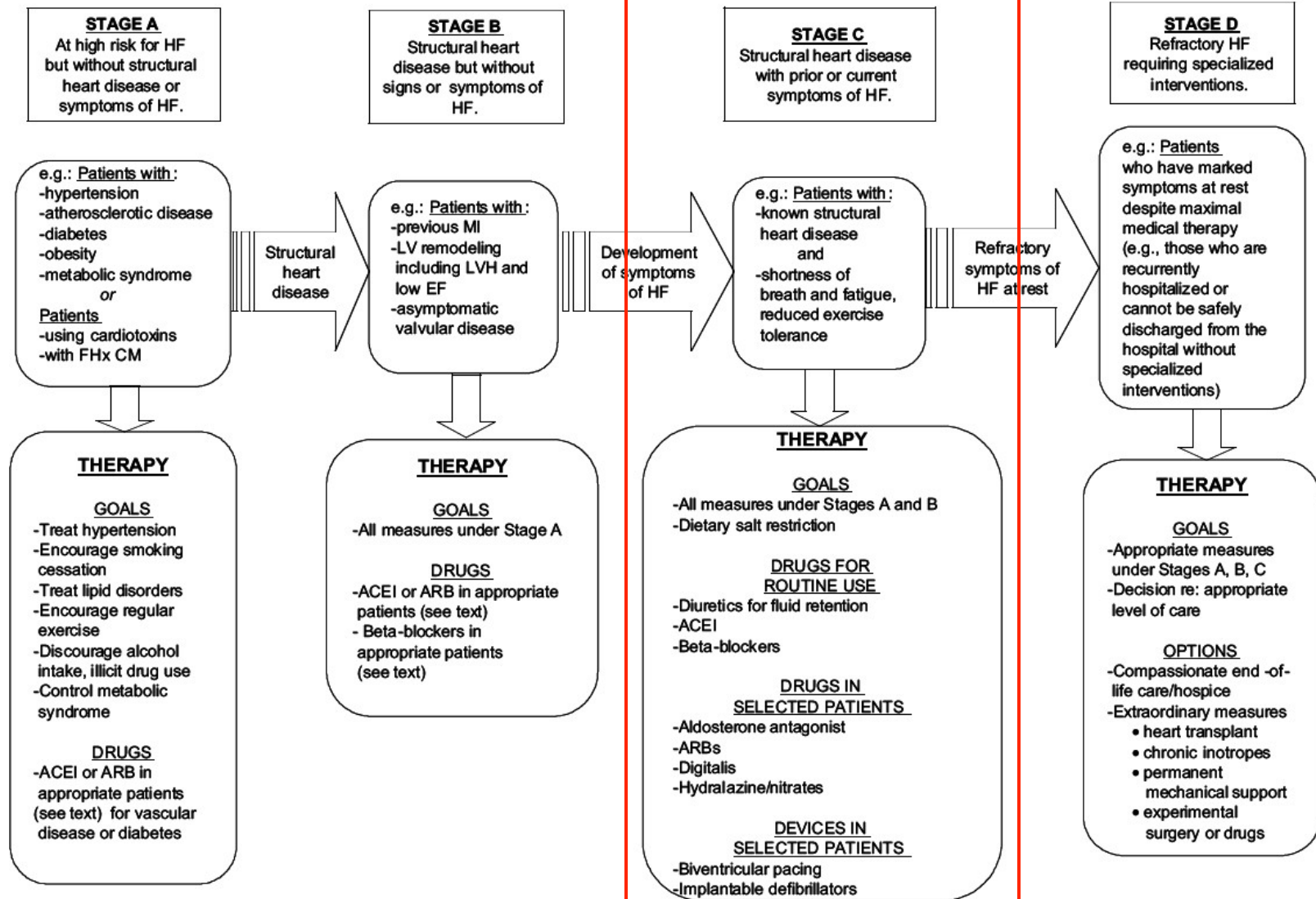


Stadio B e abitudini di vita

- Come per lo stadio A

At Risk for Heart Failure

Heart Failure

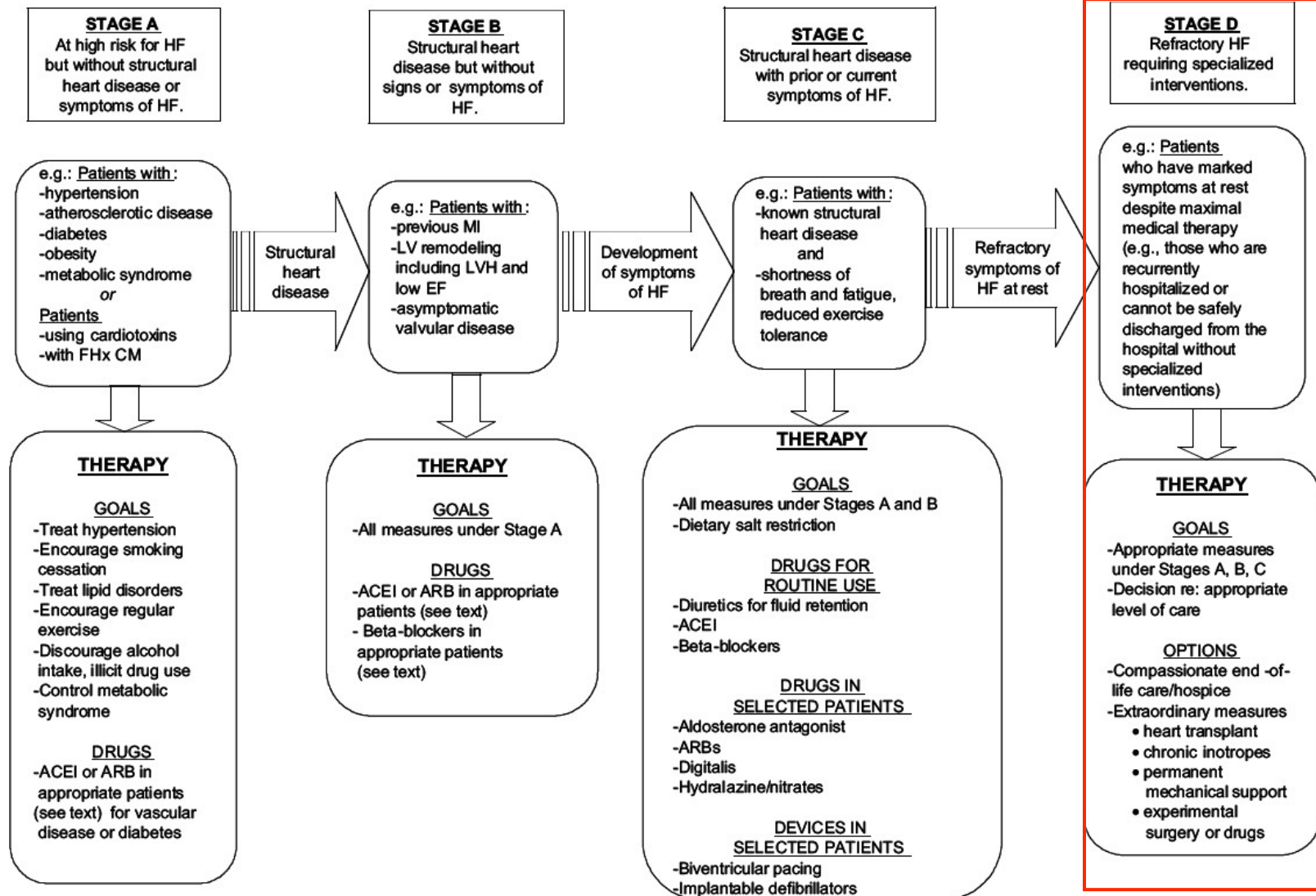


Stadio C e abitudini di vita

- Come per gli stadi A e B
- + Restrizione di sodio

At Risk for Heart Failure

Heart Failure



Stadio D e abitudini di vita

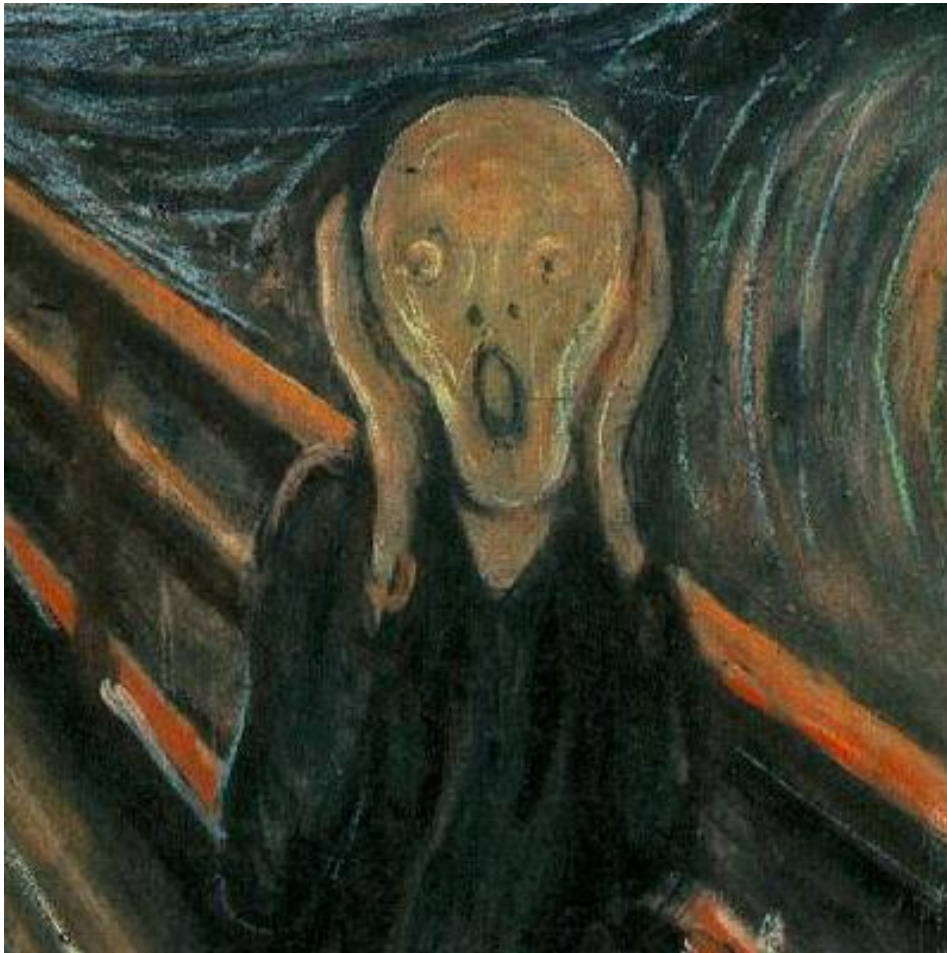
- Come per gli stadi A, B e C
- + Restrizione di sodio

Restrizione di sodio

- Lo scopo è ridurre l'idroritenzione facilitando l'azione dei diuretici (e degli altri farmaci antipertensivi)
- La quantità di sodio consigliata è 3-4* g nello stadio C e 2 g nello stadio D

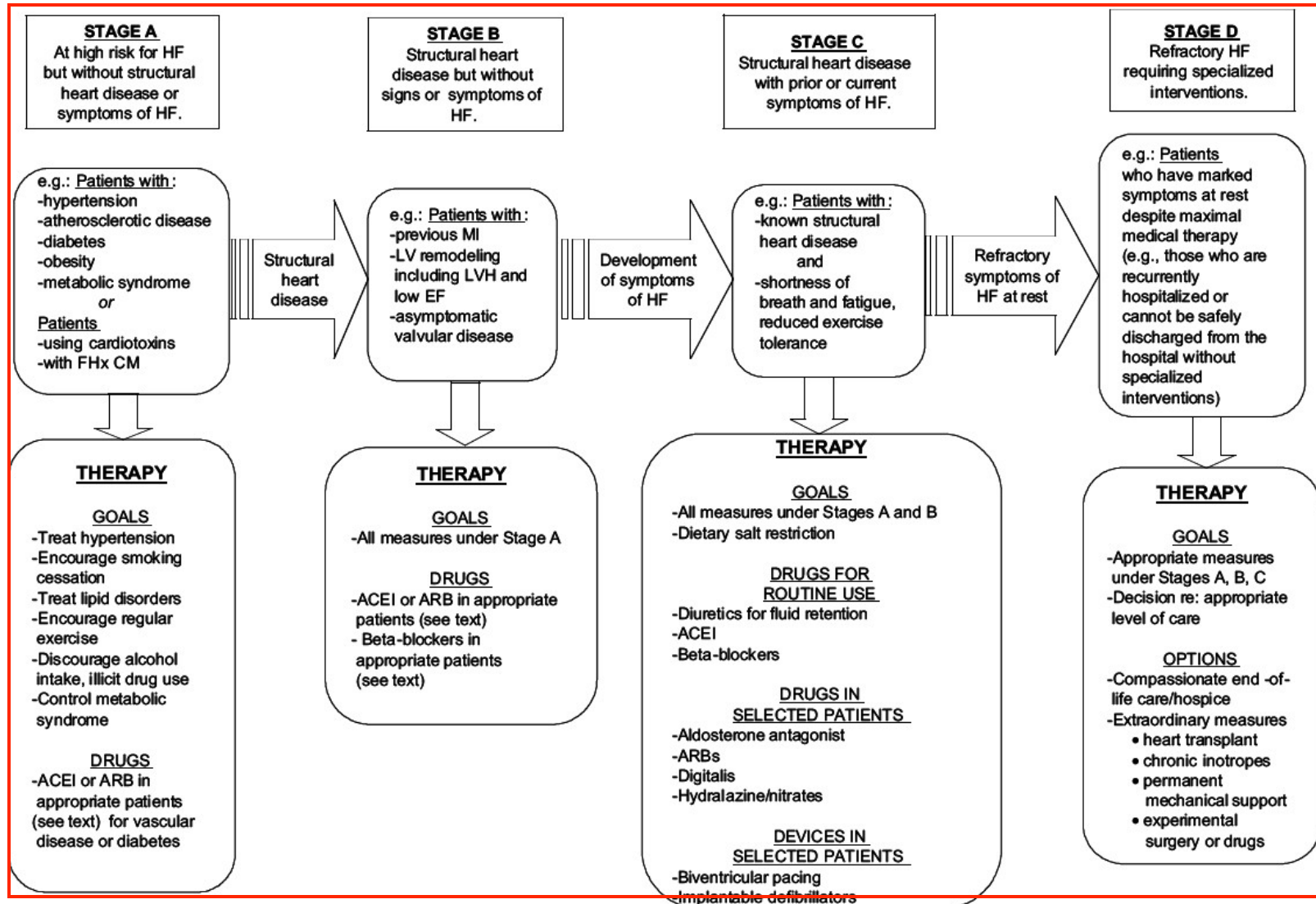
* in (parziale) contraddizione con le linee guida JNC VII per l'ipertensione

Restrizione di sodio



At Risk for Heart Failure

Heart Failure



Tutti gli stadi

- Nessuna indicazione alla supplementazione routinaria di macro- o micro-nutrienti

Heart failure evidence-based practice guidelines

The screenshot displays the Evidence Analysis Library (EAL) website. At the top, the logo for the Academy of Nutrition and Dietetics (eatright.org) is visible. A search bar is located in the top right corner. Below the header, a navigation menu includes links for Library, Guidelines, Methodology, Resources, Contributors, A-Z Index, Store, and About. A secondary menu lists various topics such as Diseases/Health Conditions, Nutrients, Foods, Life Cycle & Nutrition, and Nutrition Care Process. The main content area is titled "Nutrition Guidelines List > Heart Failure Guideline". On the left, a "Topics" sidebar lists "Heart Failure Guideline", "Executive Summary of Recommendations", and "Introduction". The main text area features the title "Heart Failure* Evidence-Based Nutrition Practice Guideline" and an introductory paragraph. Below this, sections for "Organization of the Guideline", "Definitions and Abbreviations", "Printing Guideline Materials", and "General Information and Disclaimer" are provided. A footnote at the bottom explains the terminology change from "congestive heart failure" to "heart failure" based on 2005 ACC/AHA guidelines.

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Diseases/Health Conditions Nutrients Foods Life Cycle & Nutrition Nutrition Care Process

Topics

Heart Failure Guideline

Executive Summary of Recommendations

Introduction

Nutrition Guidelines List > Heart Failure Guideline

Heart Failure* Evidence-Based Nutrition Practice Guideline

Select a category from the menu list on the left and follow the links. Within each category, hyperlinks to additional information are provided to allow you access to more information.

Organization of the Guideline

This guideline is designed so that you can access key information quickly and easily. The information is organized into the following categories: Introduction, Major Recommendations, Algorithms, Background Information and Reference List.

Definitions and Abbreviations

Throughout the guideline there is some terminology that is underlined. When placing your mouse arrow over these underlined words, a text box will appear that will provide the definition of the word or the full terminology for abbreviated words. This additional information is a web-based feature and will not appear in a printed version of the guideline.

Printing Guideline Materials

Each page of the guideline has several options for printing at the top right corner of the page. You may also print entire sections of the guideline (i.e. Introduction, Recommendations, Algorithms) under **Print Reports**.

General Information and Disclaimer

This nutrition practice guideline is meant to serve as a general framework for handling clients with particular health problems. It may not always be appropriate to use these nutrition practice guidelines to manage clients because individual circumstances may vary. For example, different treatments may be appropriate for clients who are severely ill or who have co-morbid, socioeconomic, or other complicating conditions. The independent skill and judgment of the health care provider must always dictate treatment decisions. These nutrition practice guidelines are provided with the express understanding that they do not establish or specify particular standards of care, whether legal, medical, or other.

*According to the 2005 American College of Cardiology and American Heart Association (ACC/AHA) Practice Guidelines, the term "congestive heart failure" has been replaced by "heart failure" because it is a chronic disease and the patients may not exhibit congestion as a symptom.

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MNT and Heart Failure

Referral to a registered dietitian for MNT is recommended whenever an individual has heart failure. A planned initial visit lasting at least 45 minutes and at least one to three planned follow-up visits (at least 30 minutes each) can lead to improved dietary pattern and quality of life and decreases in edema and fatigue. Along with optimal pharmacological management, MNT may also reduce hospitalizations.

Strong, Imperative

Proteins

- In assessing protein needs for patients with heart failure, clinically stable depleted patients should have a daily intake of at least 1.37 g protein/kg and normally nourished patients should have a daily intake 1.12 g protein/kg in order to preserve their actual body composition or limit the effects of hypercatabolism. Research indicates that HF patients have significantly higher protein needs than those without HF, as measured by negative nitrogen balance.
- Fair, Imperative

Energy

- In assessing energy needs for patients with heart failure, the majority of studies indicate that use of indirect calorimetry best determines energy needs. When indirect calorimetry is not possible consider starting with usual predictive equations and adjusting for increased catabolic state.
- Fair, Imperative

Fluid

- For patients with heart failure, fluid intake should be between 1.4 and 1.9 L (48-64 oz.) per day, depending on clinical symptoms (i.e. edema, fatigue, shortness of breath). Fluid restriction will improve clinical symptoms and quality of life.
- Fair, Imperative

Sodium

- For patients with heart failure, sodium intake should be less than 2000 mg (2 g) per day. Sodium restriction will improve clinical symptoms (i.e. edema, fatigue) and quality of life.
- *Attenzione all'aumento di mortalità potenzialmente conseguente alla restrizione di sodio

Folate and B12

The practitioner should encourage patients with HF to consume at least the DRI for folate through food and/or a combination of B6, B12, and folate supplementation. Folate supplementation given with other vitamins/minerals has been shown to have beneficial clinical HF outcomes.

Fair, Imperative

Thiamine Supplementation

Since diurectic use can lead to thiamine deficiency in patients with heart failure (HF), then the practitioner should evaluate thiamine status. The practitioner should encourage the patient to consume at least the DRI through food and/or supplements. The practitioner should stay alert to future research involving thiamine.

Fair, Conditional

Alcohol

Current limited evidence does not justify encouraging those who do not drink alcohol to start doing so. If a patient currently drinks alcohol, and if not contraindicated, then a maximum of one drink per day for women and up to two drinks per day for men may be tolerated. This level of alcohol consumption has been demonstrated to not be harmful in heart failure patients.

Fair, Conditional

L-Arginine, Carnitine, Coenzyme Q10 and Hawthorn

If a patient inquires about or is currently taking L-arginine, carnitine, coenzyme Q10 or hawthorn supplements, then the practitioner may discuss the limited evidence available regarding clinical heart failure outcomes. Research is inconclusive. The practitioner should stay alert to future research involving these supplements.

Weak, Conditional

Magnesium Supplementation

The practitioner should encourage patients with heart failure (HF) to consume at least the DRI for magnesium through food and/or supplements. Low levels of magnesium may be present in patients with heart failure and irregular heart rhythms may occur. The practitioner should stay alert to future research involving magnesium.

Fair, Conditional

Grazie