Nutritional assessment of children with congenital heart diseases in the Pediatric Cardiology Clinic, Pediatric Hospital, Ain Shams University

Thesis

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Ву

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List of Abbreviations

AA	Arachidonic acid
ACEIs	Angiotensin-Converting Enzyme Inhibitors
	Angiotensin II Receptor Blockers
AS	Aortic stenosis
ASD	Atrial septal defect
	Atrioventricularseptal defect
	Body mass index
	Blood urea nitrogen
CAVC	Common atrioventricular canal
CDC	Center of disease control
CHDs	Congenital heart diseases
	Congestive heart failure
СНО	Carbohydrate
	Coarctation of aorta
CPB	Cardiopulmonary bypass
	Continuous renal replacement therapy
DEXA	Dual energy x-ray absorptiometry
	Docosahexaenoeic acid
E BM	Expressed breast milk
	Essential fatty acid deficiency
EN	Enteral nutrition
FFQ	Food frequency questionnaire
FTT	Failure to thrive
GERD	Gastroesophageal reflux disease
GH	Growth hormone
GI	Gastrointestinal
HB	Hemoglobin
HCT	Hematocrit
HF	Heart failure
HFA	Height for age
BW	Ideal body weight
GF-1	Insulin growth-factor 1
[V	Intravenous
Kcal	Kilo calorie
L BW	Low birth weight
LCTGS	Long chain triglycerides
[. t	

Elist of Abbreviations

MUAC Mid upper arm circumference
MCTMedium chain triglycerides
MR Mitral regurge
NCHSNational Center for Health Statistics
NPONothing per os
NYHA New York Heart Association
PDPeritoneal dialysis
PDA Patent ductusanteriorus
PEMProtein energy malnutrition
PNParentral nutrition
PS Pulmonary stenosis
RDA Recommended daily allowance
RNIRecommended nutrient intake
REE Resting energy expenditure
Rt Right
RV Right ventricle
SD Standard deviation
SFTSkin fold thickness
SMASuperior mesenteric artery
TAPVR Total anulous pulmonary venous return
TEE Total energy expenditure
TGA Transposition of great arteries
TOF Tetrology of fallot
VSD Ventricular septal defect
WFAWeight for age
WHOWorld health organization

Introduction

Congenital heart disease (CHD) refers to any anatomic defect in the heart or major blood vessels that are present at birth (Smith, 2001). Cardiac abnormalities occur with an incidence of 8 per 1000 living births and represent 25% of all congenital malformations (Nemer et al., 2006). Congenital cardiovascular malformations present in any society with an enormous burden of grief and expenses. About 8% of all deaths during the first year of life are due to CHD and account for a third or more of infant deaths due to birth defects, more than that for any other congenital anomaly including neural tube defects (Bailey and Berry, 2005).

Growth in children with congenital heart disease (CHD) is often compromised, especially in those with either heart failure or cyanosis, and symptomatic infants are the worst to be affected (Venugopalan et al., 2001). Cardiac malformations are undoubtedly responsible for malnutrition. In some instances, the growth delay can be relatively mild, whereas in other cases, the failure to thrive can result in permanent physical or developmental impairment (Wheat, 2002). Malnutrition may then significantly undermine the outcome of corrective surgical operations and postoperative recovery (Forchielli et al., 1994).