

## 85 - BASIC ATTENTION TO THE HEALTH NEEDS: INDICATIVES FROM THE MARINGÁ HEALTHY PROGRAM

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### Introduction

The 20<sup>th</sup> century was marked by several modifications as the demographic and nutritional transitions. The lifestyle also has changed in a very impressive way becoming almost all the countries vulnerable to the increasing epidemy of chronic degenerative diseases. The demographic transition is marked mainly by the rural exodus, that is, the people from the field migrating to the cities. The data from IBGE (2004) shows that only 18,77% of the Brazilian population lived in the rural area, this pattern is linked to several structural and social problems in the cities, like the lack of basic sanitation, infrastructure, habitation and work.

The nutritional transition means the changes in the individuals' diet pattern that is characterized by the high consumption of animal products origins like fats and proteins and in the same way a great amount of refined sugar that is poor in fibers and complex carbohydrates. This pattern has affected different cultures and regions in the world despite of yours habits, they tend to a monotone diet that is directly related to a heavy burden to the health with high economic and social impacts (DREWNOWSKI & POPKIN, 1997).

Since the exit of the people from the fields to the cities maximized by the industrial revolution and more recently by the cybernetic revolution there were profound reflects in the modern man's life. These are good and evil at the same time. For example those alterations characterized by the transition of the lifestyle, that alter several human behaviors mainly with marking reflexes in the feeding and in the physical activity (PA). These changes tend to affect the physical aptitude and to rebound negatively about the health (DIONNE & TREMBLAY, 2000; WHO, 2002). As consequence, it is also verified the epidemic transition, that is characterized by the progressive passage of the prevalence of infect-contagious diseases to the chronic-degenerative ones. (ROUQUAYROL & ALMEIDA FILHO, 1999; MONTEIRO, 2000; MINAYO, 2004).

These changes brought the need of a new look to the health of the populations. In this way, the World Health Organization (WHO, 2002), the US Centers for Diseases Control and Prevention (CDC, 2004), the Brazilian Ministry of Health (BRAZIL, 2005) and other important organizations have directed/encouraged actions to health promotion based in aspects of the human behavior involving the diet and the PA, besides other cares related to the basic attention to the health.

Several documents has empathized the idea that substantial health gains can be made for relatively modest expenditures. Among these we can quote the Bauman & Craig (2005), regarding the role of PA in the world politics of health, the paper by Unal et al., (2005), on the difference of the costs and the effectiveness of the actions on primary and secondary prevention. The US Surgeon General's report on the Physical Activity and Health (1996) that is widely viewed as a seminal document in the field of PA and public health. It was the first US government document dedicated solely to the role that PA plays in promoting and maintaining health, and more recently, the document of the Brazilian Ministry of Health (2005) about the National Politics of Health including PA as a corner stone to the public health (BRAZIL, 2005).

Following this tendency, the municipal city hall of Maringá, in partnership with the courses of the health sciences area have created the Maringá Healthy Program, with base in the guidelines of the "healthy cities" from WHO. Inside of this program the "Fair Maringá Health Space" involves a series of stands of evaluation of the condition of health of the population. Among these, the stand of aerobic fitness, coordinated by members of the department of physical education from Maringá State University, evaluated the readiness for PA, the profile of cardiovascular risk, the flexibility and the aerobic fitness.

### METHODS

This is a cross-sectional study accomplished in the city of Maringá - Pr during the year of 2006, in three "Maringa Health Spaces", inside of the program "Healthy Maringa", developed in partnership by the city hall with colleges and universities of the city.

This study have involved 678 participants, that answered the Physical Activity Readiness Questionnaires (PAR-Q) and the questionnaire of risk factors (RF) for coronary artery disease of American College of Sports Medicine (ACSM, 1998), voluntarily. The use of those questionnaires intent to identify the presence of RF among the participants and to select the individuals that didn't present medical contraindications for the immediate accomplishment of the submaximal step test of the Queens College and the sit-and-reach test.

The sit-and-reach test was accomplished by 569 individuals that didn't relate bone, joint or muscle problems. For the evaluation of the flexibility the YMCA protocol was used (Young Men's Christian Association). The procedure consists on sitting down with the legs straight below a graduated bank with measures in centimeters in order to verify the degree of flexion that the person can reach. The assessment is made by comparing the obtained measure with a standardized value from a table according to the sex and age (ACSM, 2006). To the aerobic assessment the maximum oxygen uptake (VO<sub>2</sub> máx) was predicted by the Queens College protocol. For this propose the individual's VO<sub>2</sub> máx were determined by the Rate Hate (HR) at the end of the test, through the following equations: VO<sub>2</sub> máx (ml/kg/min) = 111,33 - (0,42 X HR), for men; and VO<sub>2</sub> máx (ml/kg/min) = 65,81 - (0,1847 X HR), for women. HR = heart rate at the end of the test (bpm) (ACSM, 2006). The subjects that present the desirable profile for this evaluation were 102 individuals. They didn't relate positive answers in the PAR-Q and they have indicated not more than two risk factors (RF) in the questionnaire for identification of RF of ACSM.

### Results and Discussions

In the tables below the participants' characteristics are presented, the proportion in agreement with the gender and age group, gender and nutritional state, and in agreement with the classification of the flexibility and aerobic condition levels.

Variables/measurement units	Female		Male	
	n 412	60,77 %	n 266	30,23 %
- kg (mean) ± (sd)	64,53 ± 13,38		74,74 ± 13,24	
um -maximum	29,4 - 124		42 - 119	
- m (mean) ± (sd)	1,57 ± 0,07		1,70 ± 0,08	
um -maximum	1,36 - 1,77		1,36 - 1,95	
kg/m <sup>2</sup> (mean) ± (sd)	26,14 ± 5,25		25,85 ± 4,20	
um -maximum	14,38 - 43,42		14,84 - 47,67	
Circumf.- cm (mean) ± (sd)	85,00 ± 13,72		91,02 ± 13,14	
um -maximum	55,00 - 150,00		50,00 - 134,00	
cunf.- cm (mean) ± (sd)	101,97 ± 11,35		100,69 ± 8,83	
um -maximum	57,00 - 166,00		46,00 - 134,00	
mean) ± (sd)	0,84 ± 0,09		0,90 ± 0,10	
um -maximum	0,53 - 1,37		0,67 - 1,18	

sd = standard deviation

The table 1 indicates that the women's participation is expressively higher, 60,7% of the sample. Besides, the medium values of BMI allow to infer that there is a high proportion of people with excess of weight in both groups. These results contemplate in the measures of the waist, hip and in waist to hip ratio (WHR) are also considered high as medium values.

Table 2. Participants Proportion by gender and age classes.

Age groups	Female		Male	
	freq.	%	freq.	%
< 18 years	14	3,40	8	3,01
18 - 39	118	28,64	85	31,95
40 - 59	169	41,02	96	36,09
> 60	111	26,94	77	28,95
Total	412	100	266	100
Mean ± (sd)	47,74 ± 16,61		46,68 ± 18,17	
minimum -maximum	8 - 87		11 - 87	

The Maringá Healthy program and, more specifically, the Fair Maringá Health Spaces, attracted people with a wide variation of ages, with young adults' prevalence and also many people on the middle age in the both genders. In spite of that, it can be considered that there was a good participation of people on the third age (60 years or more).

Table 3. Participants Proportion by gender and nutritional status.

Nutritional status	Female		Male	
	freq.	%	freq.	%
Underweight	7	1,89	10	4,10
Normal	172	46,36	91	37,30
Overweight	117	31,54	109	44,67
Obesity	75	20,22	34	13,93
Total	371	100	244	100

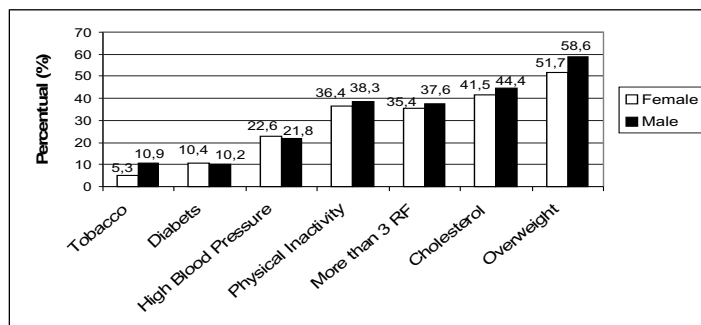
With relationship to the nutritional status the data shows clearly the problem of the nutritional transition. More than fifth percent of the people is overweight or obese. On the other hand, less than 2% and of 5% were classified as underweight between female and male, respectively.

Table 4. Participants classification by gender, flexibility and aerobic fitness level.

Classification	Flexibility				Aerobic fitness			
	Female		Male		Female		Male	
	freq.	%	freq.	%	freq.	%	freq.	%
Low	154	45,03	78	34,36	-	-	-	-
Medium	65	19,01	44	19,38	33	62,26	11	22,45
Good	29	8,48	34	14,98	18	33,96	16	32,65
Excellent	69	20,18	51	22,47	2	3,77	22	44,90
Total	25	7,31	20	8,81	-	-	-	-
	342	100	227	100	53	100	49	100

The majority of the participants' have low flexibility levels, about 64,04% of the female and 53,74% of the male. By contrast, only 27,49% and 31,28% obtained superior classifications to the average among female and male, respectively.

The graph 1 illustrates 7 important RF for coronary heart diseases (CHD). Besides these, more than a third of the participants presented the association of three or more RF. In this way, it is evident the impact of CHD in the population. That reflects the tendency pointed by the literature (MONTEIRO, 2000; WHO, 2002; BRAZIL, 2004).



Graph 1. risk Factors among the participants

Due to this reality there are no doubts about the need of the reorganization in the structure of basic attention to the health (MONTEIRO, 2000; WHO, 2002; BAUMAN & CRAIG, 2005).

The efforts should converge for the primary prevention of diseases, that is, to focus on the harmful habits as the sedentary life, the poor quality diet, alcoholism, smoking, drugs consumption, etc. Additionally actions of improvement the life conditions, like education, income, water and sanitation and access to the services of health, because these actions can produce very substantial health gains with relatively modest expenditures on interventions to reduce risks (WHO, 2002; BRAZIL, 2005; UNAL et al., 2005).

For that, the education for the health, based in the schools, is an important strategy because of their covering potential. Besides, public politics of income distribution and urban infrastructure are important to revert the current picture (CDC, 2004; MINAYO, 2004).

#### Final considerations

The current scenery of the health represents a difficult challenge, the degenerative chronic diseases have not been respecting edge, development levels, races and age groups. It is, therefore, a situation that demands efforts of the several sections of the society, about this challenge nobody can assume a looker paper.

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#### NEED OF BASIC ATTENTION TO HEALTH: INDICATIVES FROM THE MARINGÁ HEALTHY PROGRAM ABSTRACT

The current conditions of life and, especially, the situation of the health imposes to the society a constant reflection. Enormous challenges have been found in the section of the degenerative chronic diseases. Even the wealthier countries have been finding many difficulties to stop the progress of diseases as the obesity, that some decades ago affected a small portion of the population and today became epidemic. In this way, the city hall of Maringá in partnership with IES has developed the program Healthy Maringá and the Fair Maringá Health Space. This work presents the results of 678 people's evaluations that involved the readiness for physical activities (PAR-Q), the questionnaire of risks factors (ACSM), the test of flexibility (sit-and-reach) and the test of the step to evaluate the aerobic condition. The results indicate that the nutritional transition is in advanced stage, more than fifty percent of the people are overweight. The presence of avoidable risk factors is also quite high and it requests immediate initiatives so avoid that these conditions become high cost diseases and deep impact in the individuals' health and in the social balance.

Key words: health promotion, Maringá healthy, physical activity, physical evaluation.

**NECESSITE D'ATTENTION DE BASE A LA SANTE: INDICATIF DU PROGRAMME MARINGA SAIN****Le RÉSUMÉ**

Les conditions courantes de vie et, surtout, la situation de la santé impose à la société une constante réflexion. Les énormes défis sont lancés dans la section des maladies chroniques dégénératives. Même les pays les plus riches ont eu beaucoup de difficultés pour arrêter le fléau des maladies comme l'obésité. Il y a plusieurs décennies, elle n'affectait qu'une petite partie de la population et aujourd'hui c'est devenue une épidémie. L'administration municipale de la ville de Maringá en association avec le lycée et l'université ont développés le programme « Maringá Sain » et l'Espace Santé Maringá. Ce travail présente les résultats des évaluations de 678 personnes qui ont pratiqués des activités physiques (PAR-Q). Le questionnaire comporte plusieurs parties : facteurs de risques (ACSM), épreuve de flexibilité (asseoir-et-portée) et l'épreuve du pas pour évaluer la condition aérobie. Les résultats indiquent que la transition alimentaire est dans une étape importante, plus de cinq pour cent des personnes interrogées ont un excès de poids. La présence d'un facteur du risque à la fois évitables mais aussi assez haute demande des initiatives immédiates. Il faut éviter que ce risque ne devienne réalité et que ces maladies engendrent un haut coût et particulièrement pour la santé et la balance sociale.

Les mots clés: promotion de la santé, Maringá sain, activité physique, évaluation physique.

**NECESIDAD DE ATENCIÓN BÁSICA A LA SALUD: INDICACIONES DEL PROGRAMA MARINGÁ SALUDABLE RESUMEN**

Las condiciones actuales de la vida y la situación de la salud, en especial, ha puesto a la sociedad en constante reflexión. Grandes desafíos se presentan en el sector de los males crónicos degenerativos. Mismo los países más ricos encuentran muchas dificultades para detener el avance de los males como la obesidad, que hace algunas décadas afectaba una pequeña parte de la población y hoy se hace epidémica. Así, que el Ayuntamiento de la ciudad de MARINGÁ, junto con las IES viene desarrollando el programa MARINGÁ SALUDABLE y la FERIA ESPACIO SALUD MARINGÁ. Este trabajo presenta los resultados de evaluaciones de 678 personas que se representaron para la AF (PAR-Q) el cuestionario de FR (ACSM), el teste de flexibilidad (sentar y alcanzar) y el teste su-máximo de escalera para abalizar la condición cardio-respiratória. Los resultados nos indican que la transición nutricional se encuentra en estado avanzado, mas de la mitad de las personas avalizadas están con exceso de peso. La presencia de factores de riesgo evitables también es bastante alta y requiere iniciativas inmediatas para que estos no se vuelvan males de alto costo y gran impacto en la salud de las personas y en el equilibrio social.

Palabras llave: promoción de la salud, Maringá saludable, actividad física, evaluación física.

**NECESSIDADE DE ATENÇÃO BÁSICA À SAÚDE: INDICATIVOS DO PROGRAMA MARINGÁ SAUDÁVEL RESUMO**

As condições atuais de vida e a situação da saúde, em especial, impõe à sociedade uma constante reflexão. Enormes desafios se apresentam no setor das doenças crônico degenerativas. Mesmo os países mais ricos têm encontrado muitas dificuldades para deter o avanço de doenças como a obesidade, que há algumas décadas afetava uma pequena parcela da população e hoje tornou-se epidêmica. Deste modo, a prefeitura municipal de Maringá em parceria com as IES vem desenvolvendo o programa Maringá Saudável e a Feira Espaço Saúde Maringá. Este trabalho apresenta os resultados de avaliações de 678 pessoas que envolveram a prontidão para a AF (PAR-Q), o questionário de FR (ACSM), o teste de flexibilidade (sentar-e-alcançar) e o teste submáximo do degrau para avaliar a condição cardiorrespiratória. Os resultados indicam que a transição nutricional encontra-se em estágio avançado, mais da metade das pessoas avaliadas está com excesso de peso. A presença de fatores de risco evitáveis também é bastante elevada e requer iniciativas imediatas para que estes não se tornem doenças de alto custo e profundo impacto na saúde dos indivíduos e no equilíbrio social.

Palavras chave: promoção da saúde, Maringá saudável, atividade física, avaliação física.