amenorrhea (p<.001), physical activity (p<.001), calcium intake (p<.001) and body mass index (p<.001). At follow-up, subjects with good outcome had a higher percentage of bone mass increase than normal adolescents, whereas patients with poor outcome had a bone mass loss. Conclusions: 35-44 % of patients had osteopenia and related variables were body mass index, duration of illness, calcium intake and physical activity. Patients with good outcome had a high bone mass increase.

## S10.4

Genes, environment, and eating disorders: twin study findings

A. Keski-Rahkonen<sup>1\*</sup>, A. Rissanen<sup>1</sup>, J. Kaprio<sup>1</sup>, R.J. Rose<sup>2</sup>.

<sup>1</sup>University of Helsinki, Finland

<sup>2</sup>Indiana University, Bloomington, USA

Eating disorders are highly heritable conditions. Body dissatisfaction and dieting-oriented behavior are common in young people and often predispose vulnerable individuals to eating disorders.

We assessed pairwise twin correlations and heritability estimates of dieting frequency and Eating Disorder Inventory subscales body dissatisfaction and drive for thinness in a population sample of 936 female and 811 male Finnish twins aged 24–25. Body dissatisfaction was much influenced by genes, with different sets of genes operating in females and males, and with possible genetic dominance in males. Drive for thinness and dieting frequency had a moderate heritability in females and a lower heritability in males. Individual-specific environmental factors were relatively important for body dissatisfaction, drive for thinness, and dieting frequency in both males and females, but environmental factors shared by the twin pair were of negligible importance.

The genetic factors influencing body dissatisfaction and dietingoriented behavior may constitute a part of the genetic vulnerability to eating disorders. These influences are likely to be age-specific and sex-specific.

#### S10.5

Somatic consequences of eating disorders

T. Bruna\*. Robert Fleury Stichting, Leidschendam, The Netherlands

More than other psychiatric disorders eating disorders are conditions in which a disturbed psyche directly contributes to a disturbed soma.

This study aims to assess the status at admission and course of the somatic consequences and laboratory findings in a sample of patients with serious and long lasting eating disorders.

Data were analysed per diagnostic group. Associations with EDsymptom severity were examined. Survival analyses were conducted to examine whether the physical status at admission could predict treatment outcome.

The sample consisted of 167 DSM-IV ED patients (mean age 28 years, mean duration of illness 11 years) referred to a tertiairy care centre for inpatient treatment or day care. A physical examination and an extensive laboratory investigation were carried out.

Abnormal findings included anaemia, leucopenia and disturbed liver and renal function tests especially for the AN-group and electrolyte disturbances especially for the AN B/P type patients and BN patients. Most abnormal findings improved during treatment.

Empirically based guidelines for routine laboratory investigations are presented.

# S11. Reforming psychiatry in Eastern Europe

Chairs: W. Rutz (WHO, Europe), L. Jacobsson (S)

## S11.1

Swedish support to the restructuration of psychiatry in Eastern Europe

L. Jacobsson. Department of Psychiatry, Umeå, Sweden

The Swedish government has supported the restructuration of mental health services in North-western Russia, the Baltic countries and Bosnia Herzegovina since the early 1990'ies. This support has been channeled through the East Europe Committee of the Swedish Health Care Community, which is a joint body of all major actors in the Swedish health care community e.g. all professional organizations and the major care providers. Since 1995 more than 70 million Swedish crowns (6 million dollars) have been spent on hundreds of collaborative projects in which Swedish clinics and university institutions have been engaged in teaching and training of staff, study visits and supervision activities. Several thousands of professionals have been engaged in these activities. Some of these will be presented. Some evaluations of these projects have also been done and will be described.

# S11.2

Reforming psychiatry in Eastern Europe - the WHO perspective

W. Rutz\*. WHO Regional Office for Europe, Copenhagen, Denmark

Since 1999 the mental health program of the WHO Regional Office for Europe has been intensively involved in supporting necessary mental health reforms in the countries of transition in eastern, central and southeastern Europe. Focus of the work of the mental health program have been:

- Suicidality and other premature mortality, related to transitional stress and mental ill health.
- National mental health audits and planning.
- Restructuring, modernizing and humanizing services, leading to de-hospitalization, decentralization and community-based mental health services.
- And finally, counteracting taboo and discrimination.

This work is made possible with the help of WHO collaborating organizations, WHO task forces and WHO networks this work is made possible and it will be described. Outcomes as well as possible shortcomings will be analyzed.

#### S11.3

Reforming psychiatric services in Bosnia Hercegovina after the war

S. Loga\*. University of Sarajevo, Bosnia and Hercegovina

Before the war in Bosnia (1992–1995) the organization of psychiatric service was on a relatively high level and not different from the other republics in former Yugoslavia. During the beginning of the war, most of the psychiatric institutions were closed, damaged or devastated. In spite of this psychiatric services continued to work, very often in improvised and poor conditions with the help of WHO and some NGO:s. After the war, in 1996, Federation of BiH government made an agreement with the World Bank on building