

# Body height in Slovenia after World War II

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## 1. Introduction

Anthropometric research has a long tradition. Anthropology, biology, demography, and medicine were at the forefront of these efforts. Later, economists and historians joined in as well. Understanding the process of increasing body height in the historical perspective calls for a multidisciplinary, even transdisciplinary approach. It requires the knowledge of anthropology, biology, and medicine, but also historical realisations, the historical social and economic context. Only the merging of different approaches, starting points, and insights paved the way for anthropometric history (Steckel 1998, 818).

The researchers approached the issue of the increasing height of the human body in the long term with the assumption that human progress and social well-being can also be measured using the data on the physical development of the population – especially in situations where other information is insufficient, incomplete, or unreliable. In the 1970s, attempts were therefore made to quantify the changes in the living standard over the last two centuries, which also greatly encouraged the development of anthropometric history (Komlos 1992, 3-5). The basic research and interpretive strategy was to look for a correlation between the general living standard, diet quality, and disease on the one hand and body height (and weight) on the other hand. The subsequent more detailed research has gone beyond this starting point and shown that the research topic of the historical context of the changes of the human body is highly complex and only rarely linear (Baten, Blum 2012, 221-224).

The researchers analytically combined the physical (biological) characteristics of human development (Komlos 1995; Komlos, Baten 1998) into the concept of the biological standard of living, which has become a widely accepted research and interpretive paradigm in economic historiography (Harris 2021, 4-5). As John Komlos wrote:

The biological standard of living is, thus, meant to indicate in a historical context how well the human organism thrives in its socioeconomic and epidemiological environment. The concept is conceived so as to capture the biologically relevant quality-of-life component of welfare and acknowledges explicitly that the human experience is inherently multidimensional: welfare encompasses more than the command over goods and services. Health in general, including the frequency and duration of sickness, the extent of exposure to diseases, and longevity all have a contribution to welfare independent of income (Komlos 2001).

The biological standard of living attempts to quantify the quality of life as a combined multidimensional entity. In many ways, this concept ensures a more nuanced view of a society's well-being for comparative purposes than income per se (Komlos 2009, 342). The following are the prevailing biological categories regarding the living standard: life expectancy, morbidity, stature, and the study of skeletal remains (Steckel 2008).

There is a consensus among researchers that the physical changes since the 18<sup>th</sup> century (changes in body height, weight, and physical abilities) testify to and reflect the economic and demographic changes of the time. The enormous progress involving the technological advances and the development of the human body was termed the technophysio evolution, signifying the changes in human physiology (Fogel, Costa, 1997, 49). This concept was intended to provide an interpretative framework for understanding the changes in the human body (height and weight) in the historical perspective. The theory of technophysio evolution, which synthesised the findings of various sciences, is based on a scheme with four basic propositions. The first proposition is that the nutritional status of a generation, expressed in the size and shape of their bodies, determines how long that generation will live and how much work its members will be able to accomplish. The second emphasises that the work of a generation, measured in terms of the amount and intensity of work, determines the amount of goods and services available to that generation. The third points out that the quantity of goods and services available is partly due to the previous generation and that it determines the distribution of social wealth and investments in technology. The fourth proposition is that the living standard achieved by a generation also determines the nutritional status of the next generation through fertility patterns and the distribution of social wealth. The theory of technophysio evolution differs from the conventional theories of the biological evolution of the human body because it involves the ability of humans to transform their environment. A further difference is also the speed of the changes implied by the notion of the technophysio evolution (Floud, Fogel, Harris, Hong 2011, 3-6).

In the context of technophysio evolution, body height has an important place as an indicator of social well-being. The long-term changes in physical development – in body height – depend on genetic, social, and environmental factors.

In the schematic representation (Tab. 1), three determinants can be distinguished that define the body height attained in a given historical period. They are causally linked. Thus, we distinguish between social, economic, and environmental determinants, followed by those with a direct influence (proximate determinants), and then the average stature (body height). All three determinants affect individuals. The circle is completed because the consequences of these determinants also have a feedback effect on the social, economic, and environmental conditions. By referring to these determinants, the aim of this article is to present the physical development – the changes in body height – in Slovenia in the second half of the 20<sup>th</sup> century, during the communist period<sup>1</sup>. Unlike for previous times, there is an abundance of data available for this period, as regular measurement of the body height of children and adolescents became a part of the health policy and the continuous interest of researchers in the fields of anthropology, biology, and medicine.

Tab. 1. *Height as a measure of the standard of living*

Social, economic, and environmental determinants	Proximate determinants	Average stature	Functional consequences
<ul style="list-style-type: none"> <li>- Income</li> <li>- Social status</li> <li>- Access to food</li> <li>- Personal hygiene</li> <li>- Sanitation</li> <li>- Air quality</li> <li>- Family size</li> <li>- Labour organisation</li> <li>- Cultural values</li> <li>- Etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Diet</li> <li>- Disease</li> <li>- Energy expenditure (for physical maintenance and activity)</li> </ul>	<p>Data sources:</p> <ul style="list-style-type: none"> <li>- Children</li> <li>- Students</li> <li>- Prisoners</li> <li>- Convicts</li> <li>- Slaves</li> <li>- Indentured servants</li> <li>- Runaways</li> <li>- Military recruits</li> <li>- Post office workers</li> <li>- Passport holders</li> <li>- Skeletal remains</li> <li>- Etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Morbidity</li> <li>- Mortality</li> <li>- Cognitive performance</li> <li>- Labour productivity</li> <li>- Work intensity</li> <li>- Earnings</li> <li>- Happiness</li> <li>- Marital success</li> <li>- Etc.</li> </ul>

Source: Steckel 1995; Harris 2021.

The social sciences and humanities in Slovenia, especially historiography, have only just started asking anthropometric research questions, although an example was already set as early as in 1969 by the French historian Emmanuel Le Roy Ladurie, who systematically investigated the geographical variations and socioeconomic correlations of body height (Komlos, Meermann 2007, 261). However, thanks to the previous research conducted by other disciplines, it is nevertheless possible to place physical development into the economic and social-historical context for the more recent historical periods. Physical development will be presented in the context of the general economic and social development, as the prevailing thesis among Slovenian experts throughout the 20<sup>th</sup> century was that a close correlation existed between the increasing body height and the improved living conditions. All interpretations of the anthropometric research were based on this premise. By far the most prevalent is the biological thesis that better nutrition, access to health care, and reduced workload for children and youth, especially in the rural areas, all played a decisive role in the increasing body height.

The second half of the 20<sup>th</sup> century was marked by a rapid transition from an agrarian to an industrial society within the communist concept of social and economic modernisation (Prinčič 2013). Based on the ideological construction of modernity, realistic plans and efforts were carried out with aim to improve the living conditions in the areas of nutrition, health, housing, and the general well-being

of the entire population. The communist authorities were aware that this would have been a long-term goal (Rendla 2018a, 15-40) and did not envisage any changes in the short term. Therefore, they focused their efforts on children and youth. In the long term, the improvements in living conditions were also supposed to lead to a better physical condition of the population. The objective was all the more important because the communist authorities blamed the pre-war authorities for the disproportionate distribution of social wealth, profound social disparities, and the resulting poor living conditions for the majority of the population. The credibility of the new authorities after World War II hinged precisely on their efforts to improve the living conditions of most of the population. The physical development of the population was measured using various parameters of the physical development of children and adolescents – i.e., among school-age children and adolescents (Dovečar 1996, 52-72), the population that Bernard Harris classifies as controlled and thus most easily accessible for measurements. The measurements were usually focused on body height and weight. Both categories were seen as benchmarks of the improved living conditions of the population and of the long-term success of economic and social development. In the years after World War II, this anticipated the subsequent standpoint of many economic historians: that body height was a mirror of the condition of society (Harris 2021, 5-7).

## **2. Pre-World War II anthropometric studies**

The first published measurements of people's body height date back to 1903. They were published in the journal of the Anthropological Association in Vienna by A. Weisbach, a military doctor from Graz. The data were obtained by measuring 2481 soldiers aged between 21 and 25. The soldiers came from the Slovenian territory. In addition to height, their hair and eye colour, skin tone, and head circumference were also measured. The study was important because it sought to conduct a regional comparison of the body height of soldiers from the Slovenian territory. In addition, the author compared the body height of the Slovenian soldiers with those from other parts of the Habsburg Monarchy (Weisbach 1903). The survey is considered to be the first anthropometric survey in the Slovenian territory known to date (Dovečar 1996, 51).

Another documented study was carried out in 1925 in the eastern part of Slovenia. Franjo Žgeč, the author of the study, asked his teaching colleagues in primary schools to measure the height and weight of pupils in rural, urban, and industrial (mining) settings. He left the judgement regarding the measurement sample – which pupils/classes to include in the measurements – to the teachers' discretion. The data obtained were analysed only at the level of individual schools. In the conclusion, the author compared the height and weight of the pupils by gender and in view of their social background. His conclusions were unequivocal, as he made a clear claim about the correlation between the children's height and weight and the well-being of their families. Due to their better living conditions, urban bourgeois children were supposedly taller and heavier than peasant and working-class children. Žgeč attributed the differences to better nutrition, better housing conditions, and consequently better health (Žgeč 1926). In the Slovenian

territory, this research introduced the thesis that children's height and weight were determined by their socioeconomic background and the consequent living conditions. This was universally accepted and has not been challenged or disputed later.

Another study took place in the school year 1939/40. It measured the physical development of secondary school youth in Ljubljana and is important because it is the first professionally conducted study. Its author, Božo Škerlj, is generally considered as the first Slovenian anthropologist. For many years he studied at various European and American universities (Bufon 2013). His book *Fizično-pubertetni razvoj ljubljanskih srednješolcev* (Development of Secondary School Students in Ljubljana, Škerlj 1950) is considered a standard anthropological work with a reliable database. For the first few years after World War II, his measurements were used as norm tables in other anthropometric studies.

In 1940, the most ambitious study of the physical development of children up to the age of 14 was published. The survey aimed to obtain information on the height and weight of primary school pupils. Just like the first study in 1926, this one was also carried out by teachers. Its goal was to learn more about children's physical development and the connections with their social origins. The study covered the whole of the Slovenian territory, and the sample of children included in the measurements was representative. It included regional structure, the parents' occupational structure, and their social and economic situation. The teachers carried out the measurements following uniform instructions to ensure a representative sample. They also ensured that the measurements were controlled. The results of the body height (Debevec 1940, 8-18) and weight (Kimovec 1940, 19-24) measurements were systematically analysed and interpreted. Already before World War II, the authors of the study drew attention to the biological standards of living, which were closely associated with the economic and social conditions of children's living environment. They were convinced that:

The immanent principles of bodily development depend not only on the hereditary substance – on inherited characteristics – but also, to the greatest extent, on the circumstances in which this development takes place. The material and social circumstances entail elements that certainly exert a decisive influence on the individuals' overall development.

They kept underlining nutrition, housing, hygiene, diseases, etc. Therefore, they undertook a detailed analysis of the social origin (bourgeois, rural, industrial environment) and looked for differences within the individual population categories (Mencej 1940). Ultimately, they managed to present a credible picture of the physical development of children shortly before World War II.

### **3. Post World War II anthropometric studies**

Shortly after World War II, regular monitoring of the health and physical development of children and adolescents was introduced. Each year, they were regularly screened at systematic medical check-ups in the context of school activities. The general health, nutritional status, height, and weight of primary and secondary

school children were measured and assessed. The data would be partially analysed but rarely published in printed form. In addition to systematic check-ups, the physical development of children and youth was regularly monitored – at the beginning every ten years, but later much more frequently. The physical development projects became a regular part of research in biology and medicine. The first three surveys were carried out in 1949, 1959, and 1969/71. The first two studies (1949 and 1959) were important because they were carried out to establish the standards (create norm tables) that could be used in everyday practice to assess whether the development of individuals was appropriate.

The first post-war survey, carried out in 1949 entailed almost 20,000 children and focused on secondary school youth. Primary school pupils represented approximately one fifth of the sample. In the case of primary school children, only their weight and height were measured, separated by gender. Most of them came from rural and industrial backgrounds. In the case of secondary school pupils, the social structure was also taken into account. Therefore, this sample was much more representative. The measurements were carried out by professional staff, ensuring real-time monitoring and entry of the results for each individual, including his or her social origin (Lunaček 1951, 324). The 1959 survey covered just under 9,000 primary and secondary school pupils and applied the same parameters. The relevance of the sample was ensured through the cooperation of the Statistical Institute, which professionally determined the sample for the measurement of children and adolescents. In addition to the parameters of the physical development of children and youth, this study also examined the correlations with the children's social origins (Telesni razvoj 1959, 1). Another important study took place in 1969/71 when researchers used as many as 31 anthropometric measurements to assess the physical development of children and adolescents between the ages of 7 and 18 (Dovečar 1996). In 1981/82, the survey was extended to a sample of children and youth aged between 6 and 20, using 15 anthropometric measurements. In 1990/1992, the researchers in the framework of the project titled *Antropološke karakteristike otrok in mladine v Sloveniji* (Anthropological Characteristics of Children and Youth in Slovenia) measured children and adolescents between the ages of 7 and 18, using 20 anthropometric measurements. The research involving the student population also expanded. In addition to cross-sectional studies, longitudinal ones were also carried out. The first one was initiated in 1954 and completed in 1966. The second one took place between 1974 and 1979, while the third one lasted from 1990 to 1995. In addition to other measurements, body height and weight were also measured (Štefančič *et al.* 1996, 13-15).

In the school year 1970/71, a new ambitious research programme was launched. Its goal was to track or measure the physical development of children and adolescents every school year. Initially, only some of the schools were included in the sample, which would then change each year to ensure more representative measurements. During this time, research organisation and information technology were not yet sufficiently developed to include the entire primary and secondary school population. Physical education teachers would enter the results of the measurements (body height and weight, chest circumference, long jump, running, etc.) in

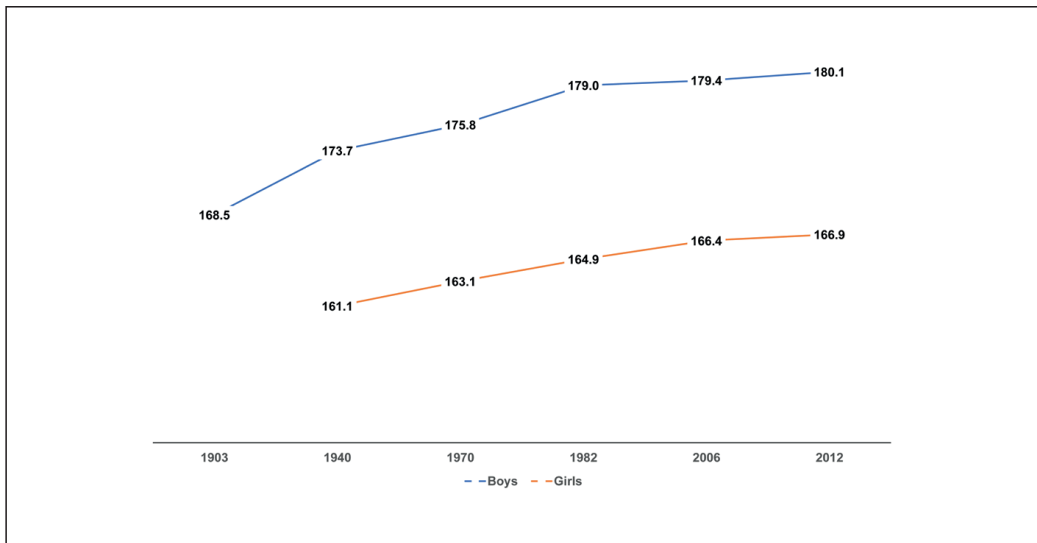
the prescribed forms (Navodilo 1987). The measurements were carried out in May and June during regular school hours. Between 1981 and 1985, 37,000 children from nine municipalities were included. The next step was to collect data from the selected schools for further detailed analysis. The results were then published twice. Gradually, more and more schools were included in the measurements, and in the 1989/90 school year, all primary and secondary schools took part in the physical development measurement programme. On average, 95 % of primary school pupils and 80 % of secondary school students were measured. The percentage is lower for students because vocational schools were not included in the measurements. At the Faculty of Sport, the results were analysed in view of the individuals, their age, gender, school, and region. They were also processed at the national level. The results of the individual development analyses were made available to parents and personal physicians, while the aggregated data at the regional and national levels were available to school and health authorities (Kovač *et al.* 2011, 11-14).

#### 4. Long-term trend

Just like in the case of all other social and economic parameters, all assessments of the increases in body height after World War II involved a comparison with the pre-war situation. Already after the first measurements in the post-war period, comparisons with the pre-war period began – i.e. with the measurements of secondary school students in Ljubljana in the school year 1939/40. Later, comparisons were based only on post-war measurements – on the results of the 1949 and 1959 measurements, which were considered scientifically correct due to the representativeness of the measurement samples. The measurements of soldiers from 1903, which allowed for body height comparisons throughout the 20<sup>th</sup> century, were only rarely referred to. This was due to the structural differences in the samples and the survey methodology. The measurements recorded in 1903 were intended to provide an overview of the situation and identify any regional variations in body height. Military doctors were not interested in the developmental dimension of the soldiers' physical growth. On the other side, the research that took place before and after World War II was strongly focused on understanding and measuring the course of the physical development of children and youth in relation to their socioeconomic environment. The first studies were limited to children. It was only after World War II that the sample was extended to adolescents up to 20 years of age and later also to the university student population.

The results of the measurements conducted in 1903 will be included in the long-term comparison as well. Despite the shortcomings, it should be emphasised that this data, although it only included men of different ages, nevertheless provides a credible approximation of how the body height increased in the case of the Slovenian population throughout the 20<sup>th</sup> century. The comparison will be made on the example of 18-year-olds, as by that age, most of them should already have reached their final body height. Moreover, precisely for this category of the population, the data are comparable in the long term, given the representativeness of the sample and the measurement methodology.

Fig. 1. Average body height in cm in Slovenia in the 20<sup>th</sup> century (18-year-olds)

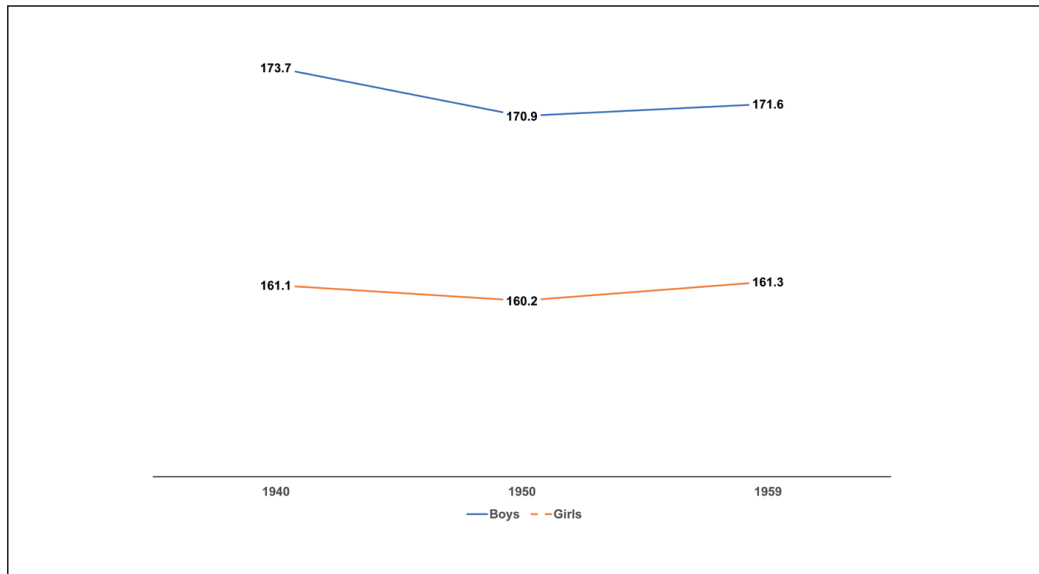


Source: Weisbach, 1903, 234-251; Dovečar, 1996, 59-60; Strel, Starc, Kovač, 2007 (67-71), 2012 (23-24).

Throughout the 20<sup>th</sup> century, the average body height kept increasing. This phenomenon was noticeable until the 1980s. Then it started to slow down. Since the beginning of the 20<sup>th</sup> century, the body height of boys has increased by almost 11 cm (until 2006), or just over 6 %. The increase in height before World War II (5.2 cm by 1940) and after it (5.7 cm by 2006) was roughly the same. For girls, the figure from the beginning of the century is not yet available. However, since the pre-World War II measurements, girls have gained 5.8 cm in height (by 2006), which is virtually the same growth trend as in the case of boys. On this basis, it is safe to assume that during the 20<sup>th</sup> century, girls have also gained about 10 cm in body height. In terms of physical development, adolescents at the end of the 20<sup>th</sup> century were a year or two ahead of their pre-World War II peers, with girls even slightly ahead (Dovečar 1996, 58). The secular trend followed the international processes. In the rest of Europe, growth was also characteristic of the entire 20<sup>th</sup> century. The increase was about a centimetre per decade. The average body height of adolescents in Slovenia today does not deviate from the Central European average (Hatton, Bray 2010). Only in the second half of the 20<sup>th</sup> century was growth slightly faster – by 0.5 cm in comparison with the first half of the 20<sup>th</sup> century. In terms of the increase in body height, Slovenia thus shares the characteristics of the Central European countries as well as those of the Southern European countries due to the slightly faster growth in the second half of the century. Therefore, it exhibits characteristics that correspond to its geographical position between Central and Southern Europe. Hatton and Bray argue that the declining infant mortality rates also played a prominent role in the secular body height trend as an indicator of the improvements in hygiene and health conditions (Hatton, Bray 2010, 408). The



Fig. 2. Average body height in cm 1939-1959 (18-year-olds)



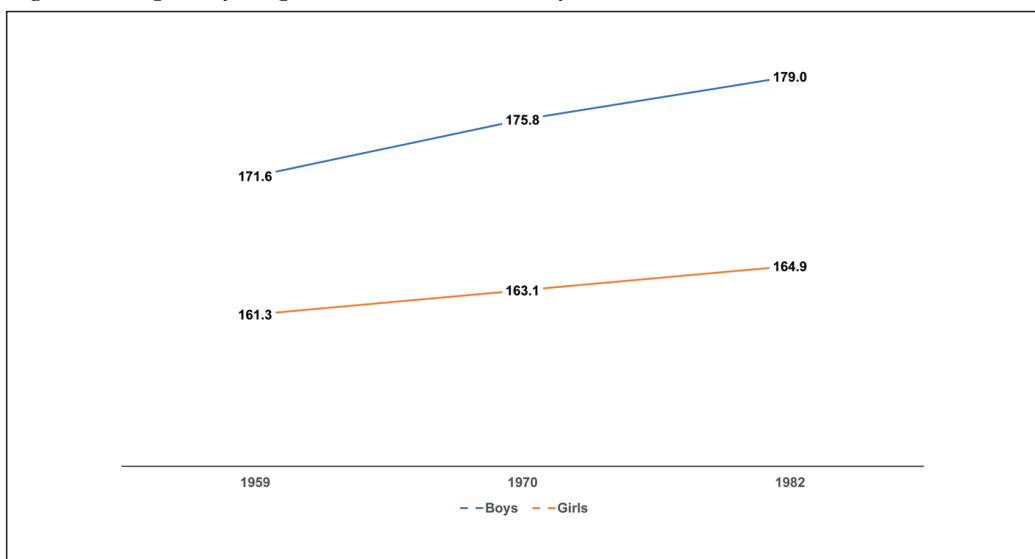
Source: Telesni razvoj 1950, 3; Telesni razvoj 1960, 3-4; Dovečar, 1996, 59-60.

Slovenian example confirms their claim. Infant mortality declined slightly between the middle of the 19<sup>th</sup> century and World War I. After the end of World War I, however, a rapid decline began that continued until the beginning of the 21<sup>st</sup> century. Between 1913 and 2003, the infant mortality rate fell from 170 per mille to 4 per mille. The downward trend was particularly strong as of the 1960s, and the process coincided with the declining fertility rates (Šircelj 2006, 95).

However, the long-term and short-term trends could differ. Within the secular trend, periods of the declining height of adolescents were also identified. The first two decades after World War II focused only on the comparisons with the 1939/40 measurements rather than those taken throughout the century. Therefore, already the first measurements (in 1949 and 1959) reflected the impact of World War II on the body height of adolescents.

Božo Škerlj, the author of the 1939/40 study, underlined the gravity of the situation – the immediate and long-term consequences of World War II on body height. He used calculations to demonstrate the decline in the body height of children and adolescents due to the wartime situation. The height loss should have been included in the war damage calculations – in the categories of the long-term consequences for human development. The phenomenon should have been treated on par with fatalities or property damage (Škerlj 1950, 99-105). His calculations were also supported by Slava Lunaček (Lunaček 1951, 327-330). Both Škerlj and Lunaček claimed that the most affected children during the war were those in puberty, who were unable to reach their potential body height due to poor nutrition, widespread diseases, and stress. For secondary school youth, the differences amounted to up to 2 cm for boys and about a centimetre for girls.

Fig. 3. Average body height in cm 1959-1982 (18-year-olds)



Source: Telesni razvoj 1960, str. 3-4; Dovečar, 1996, 59-60.

As of the 1960s, the pre-war situation was no longer the basis for comparison, as the effects of the stunted physical development during World War II were considered to have gradually receded. A comparison with 1959 showed different results: after stagnation, the increase in body height accelerated.

The 1960s and 1970s are considered the period of the fastest increase in body height. This time also coincides with a rapid increase in the quality of life by all standards. Health services would regularly monitor the relationship between children's physical development and nutrition status. These data also attest to long-term improvement.

Tab. 2. Body development and nutrition status in 1963 and 1990

	Body development		Nutrition status	
	1963	1990	1963	1990
Good	60.0%	81.2%	55.0%	70.0%
Average	31.5%	12.2%	33.8%	15.9%
Inadequate	8.5%	6.6%	10.9%	14.1%

Source: Delo 1964, 47; Zdravstveni letopis 1991, 135.

The improvement in living conditions was widespread and covered virtually the entire population. We will list just a few examples as indicators of the broader processes. The various housing construction programmes improved the living conditions. Between the middle of the 1950s and the year 1990, the average apartment size increased by 50 % (to 70 m<sup>2</sup>), while the average area per occupant doubled (to

23 m<sup>2</sup>). In 1981, 99 % of dwellings had electricity, 92 % had running water, and 71.5 % had bathrooms. By the 1990s, central heating, plumbing, and bathrooms became even more widespread (Rendla 2018a). The expansion of the health service (Zupanič Slavec 2017, 147-200) and regular annual check-ups of school-age youth contributed to the improved health conditions. For example, at the beginning of the 1980s, each pre-school child was examined an average of five times in an infirmary, outpatient clinic, or consultation room at the primary health care level, while schoolchildren were examined 2.5 times (Informacija 1981, 22). This was compounded by the improved nutritional status: the introduction of regular school meals for children represented an especially important contribution (Delo 1963; Zdravstveni letopis 1991).

Since the mid-1950s, much attention has been paid to ensuring a healthy and balanced diet to prevent diseases and conditions that can be caused by unhealthy eating. In 1954, a special institution was established to coordinate the efforts to improve the nutritional standards and prescribe the standards and norms for nutrition in kindergartens and schools (Rendla 2018b, 203). After the war, the diet structure gradually improved for the majority of the population. The quantitative consumption of each food item per household member shows an increase in the consumption of fresh and processed meat and meat products, fish, fresh and processed fruits, oil, milk, cheese, eggs, and vegetables on the one hand, and a decrease in the consumption of cereals (flour, bread, pasta) and fats on the other hand. This meant that the diet improved in terms of the energy as well as nutrient composition. Carbohydrates kept decreasing in the diet structure, while the ratio between plant and animal protein gradually moved towards the recommended one-third share of animal protein (Rendla 2018b, 195).

## 5. Conclusion

Physical growth results from a combination of genetics, environmental, and socio-economic conditions. Already the very first studies on children's overall physical development and the attained body height were based on the assumption that improved living conditions would lead to taller children and adolescents in the long term. All subsequent research on body height also assumed a correlation between body height and improvements in health, nutrition, housing, and general social and personal well-being. The improved living conditions created the social and economic context for children to grow faster. Throughout the 20<sup>th</sup> century, body height kept increasing by approximately one centimetre per decade. This phenomenon accelerated during the 1960s, when, on the one hand, the effects of World War II had been overcome while the living standard started to increase rapidly. The accelerated growth was evident in both genders but somewhat more pronounced in boys. In the late 1980s, the increases in body height slowed down. Until the 1960s, the social and economic determinants of body height were also being identified. The measurements taken before World War II detected differences in body height in children from bourgeois, industrial, or rural backgrounds (Žgeč 1926; Debevec 1940b, 8-18). The 1949 study also confirmed this fact in 18-year-old adolescents (Lunaček 1951, 327-330). With swift urbanisation and improvements in living

conditions, these disparities gradually diminished in the second half of the 20<sup>th</sup> century. The modern studies of the increases in body height interpret the long-term trends as a complex interplay of biological (genetics) and socioeconomic conditions (Dovečar 1996, 56). Physical development is therefore a very complex issue that, in the long term, cannot be interpreted in a one-sided manner.

<sup>1</sup> The present article is the preliminary result of a broader long-term research programme regarding the economic and social history of Slovenia in the 20<sup>th</sup> century, taking place at the Institute of Contemporary History in Ljubljana (Slovenia).

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## Summary

### *Body height in Slovenia after World War II*

The article deals with the development of stature (body height) in Slovenia in the second half of the 20<sup>th</sup> century, during the communist regime. In contrast to the earlier periods, a large amount of data is available for this time. The regular measurement of the body height of children and adolescents was a part of the health policy and the constant interest of researchers in the fields of anthropology, biology, and medicine. Social sciences and humanities in Slovenia, especially history, are just beginning to focus on anthropometric research questions. The trend of increasing body height is presented in the summarised general economic and social development context. Throughout the 20<sup>th</sup> century, the prevailing thesis among Slovenian experts was that a correlation existed between physical growth and the population's socioeconomic status. Apart from genetics, better nutrition, physical and residential hygiene, accessible health care, and improved housing conditions were thought to play a crucial role in the long-term increases in body height.

## Riassunto

### *Altezza corporea in Slovenia dopo la Seconda guerra mondiale*

L'articolo tratta dello sviluppo della statura (altezza corporea) in Slovenia nella seconda metà del XX secolo, durante il regime comunista. A differenza dei periodi precedenti, per questo periodo è disponibile una grande quantità di dati. La regolare misurazione dell'altezza corporea di bambini e adolescenti faceva parte della politica sanitaria e del costante interesse dei ricercatori nei campi dell'antropologia, della biologia e della medicina. Le scienze sociali e umanistiche in Slovenia, in

particolare la storia, hanno appena iniziato a concentrarsi su questioni di ricerca antropometrica. La tendenza all'aumento dell'altezza corporea è presentata nel contesto generale dello sviluppo economico e sociale. Per tutto il XX secolo, la tesi prevalente tra gli esperti sloveni era che esisteva una correlazione tra la crescita fisica e lo stato socioeconomico della popolazione. Oltre alla genetica, si pensava che una migliore alimentazione, igiene fisica e domestica, maggiore accessibilità all'assistenza sanitaria e migliori condizioni abitative svolgessero un ruolo cruciale nell'aumento a lungo termine dell'altezza corporea.

*Keywords:* Body Height, Socioeconomic Status, Slovenia, the 20<sup>th</sup> century.

*Parole chiave:* Altezza corporea, Stato socioeconomico, Slovenia, XX secolo.