



# DNA OF FINNISH MEN

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## 1 Genealogical origin of Finns

The Finnish men have inherited their DNA mainly from two y-haplogroups, N and I1, which represents about 90 % of Finnish men. 61.5 % of Finnish men belong to the y-haplogroup N, which is a clear mark of Fenno-Ugric Finns (Table 1.1).

Table 1.1 Y-haplogroup frequencies in some European countries (Eupedia).

Haplogroup	Finland	Sweden	Russia	Norway	Denmark	Germany	England
N	61.5 %	7.0 %	23.0%	2.5 %	1%	1.0%	0.0%
I1	28.0 %	37.0 %	5.0%	31.5 %	34%	16.0%	14.0%
I2	0.5 %	5.0 %	10.5%	4.5 %	7.5 %	6.0%	7.0%
R1a	5.0 %	16.0 %	46.0%	25.5 %	15%	16.0%	4.5%
R1b	3.5 %	21.5 %	6.0%	32.0 %	33%	44.5%	67.0%
Others	1.5 %	13.5 %	9.5%	4.0 %	9.5 %	16.5%	7.5%
Total	100.0 %	100.0 %	100.0%	100.0 %	100.0 %	100.0%	100.0%
STD	0.0 %	27.1 %	27.8 %	30.8 %	30.9 %	34.2 %	40.2 %

Nearest neighbors, the Swedes, have I1 as their most common y-haplogroup, which is coming from a German tribe, Goths. I1 is in the second place in Finland. If we calculate the standard deviation of these five haplogroups from the Finns, the Swedes men are the genealogically nearest relatives to the Finns with 27 % deviation.

Russia comes genealogically next after the Swedes. However, the their most common y-haplogroup is R1a, which is known to be a mark of Slavs. The frequency of R1a in Finland is only 5 %, which is lower than also in other Nordic countries and in Germany.

The most common haplogroup in Norway, Germany and England is Rib, which is coming from the Celts. The frequency of Rib in Finland is only 3.5 % or lowest of the above countries.

## 2 Fenno-Ugrian tribes

Finns are an original type of people, which have their original language Finnish. However, we can separate three tribes Western Finns, Tavastians and Karelians.

The first Finns came to Finland at about 3000 B.C. during the age of Comb-Ceramic culture. They were coming from the Ural Mountains during several thousand years of Stone Age. This can be proved by the vessels found overall of Finland. They were spoken Finnish language or their dialects and had Fenno-Ugrian DNA. They were mainly two tribes, Karelians and Tavastians, which arrived Finland from the east about 1000 – 2000 years ago.

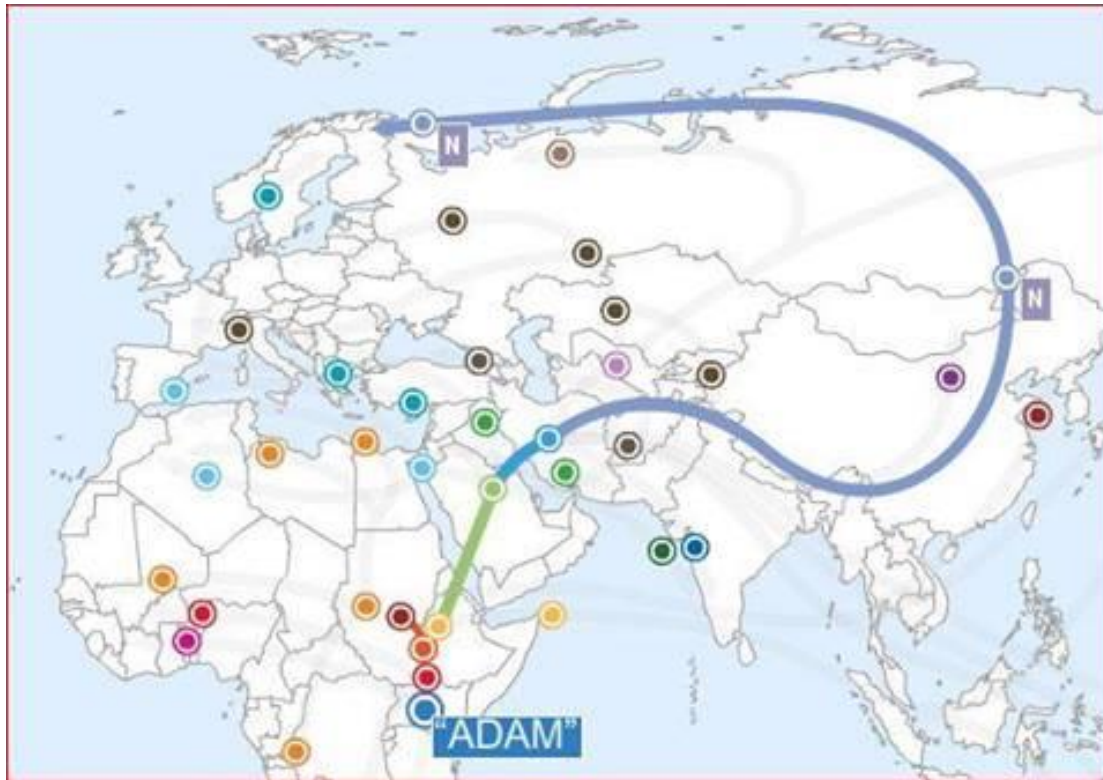


Figure 2.1 The route of N1c1 men (Fenno-Ugric) to Finland was coming from China to Ural Mountains and from there to Finland.

On their route from East Asia to Finland we can still find haplogroup N1 men in Russia. In Russia about 23 % of the men have haplogroup N1. The highest frequencies are among the Udmurts (67%), the Maris (61%), Komis (51 %), Lithuanians (42 %), Latvians (38 %) and Estonians (34 %), which belong to the Fenno-Ugric tribes (Table 2.1).

Table 2.1 Frequency of y-haplogroup N1 in some European countries and tribes.

1 Udmurts	67.0%	12 Mordvins	15.0%	23 West Germany	2.0%
2 Finland	61.5%	13 Belarus	10.0%	24 Serbia	2.0%
3 Maris	61.0%	14 Gotland	7.5%	25 North Germany	1.5%
4 Komis	51.0%	15 Sweden	7.0%	26 Moldova	1.5%
5 Lithuania	42.0%	16 Ukraine	5.5%	27 Montenegro	1.5%
6 Latvia	38.0%	17 Poland	4.0%	28 Denmark	1.0%
7 Estonia	34.0%	18 Turkey/Ar	4.0%	29 Germany	1.0%
8 Chuvashs	28.0%	19 Slovakia	3.0%	30 East Germany	1.0%
9 Russia	23.0%	20 Bosnian Sr	2.5%	31 Iceland	1.0%
10 Bashkirs	17.0%	21 Norway	2.5%	32 Gagauzes	1.0%
11 Tatars	16.0%	22 Bosnia-He	2.0%	33 Switzerland	1.0%

The frequencies of Haplogroup N1c1 are highest in Eastern Finland and in North Russia, which give indication of the route of Fenno-Ugric people from the Ural Mountains to Finland (Figure 2.2). High frequencies can be found also among Lithuania, Latvia and Estonia as well as among the people in Lapland.

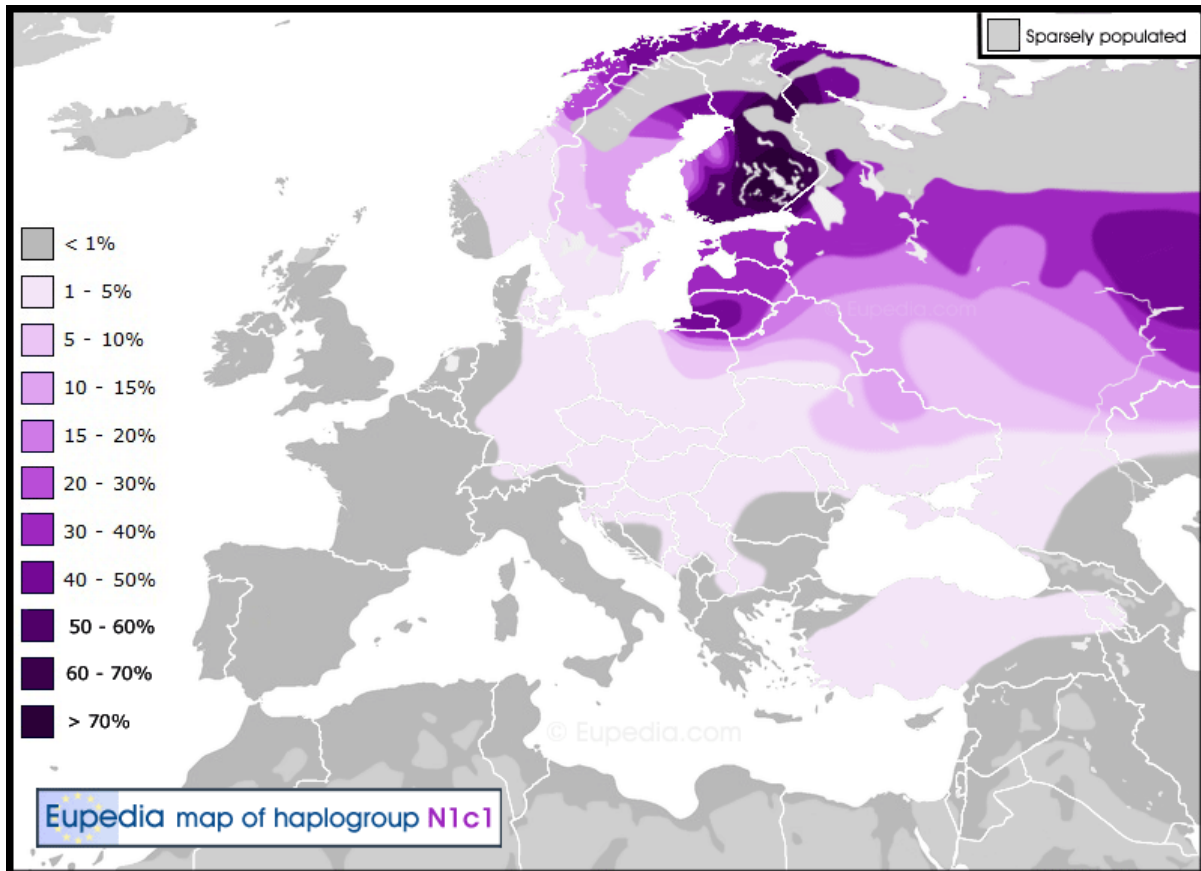


Figure 2.2 Frequencies of haplogroup N1c1 in Europe (Eupedia).

Genetic roots of N-haplogroup men can be found in N-haplotree (Figure 2.3), which has been constructed using Single Nucleotide (SNP) analysis. From this tree it can be found that the Karelians and the Savonians are coming from the same branch, CST10082, which was created 4100 years ago. The Tavastians and the Balts separated from each other from the branch, CST2929 about 3200 years ago.

We can also notice that the Rurik, who was the founder of Novgorod, belongs to this Baltic branch of N-haplotree. Thus the Russian emperors have their roots in haplogroup N, which is presenting Balts and Finns in the haplotree.



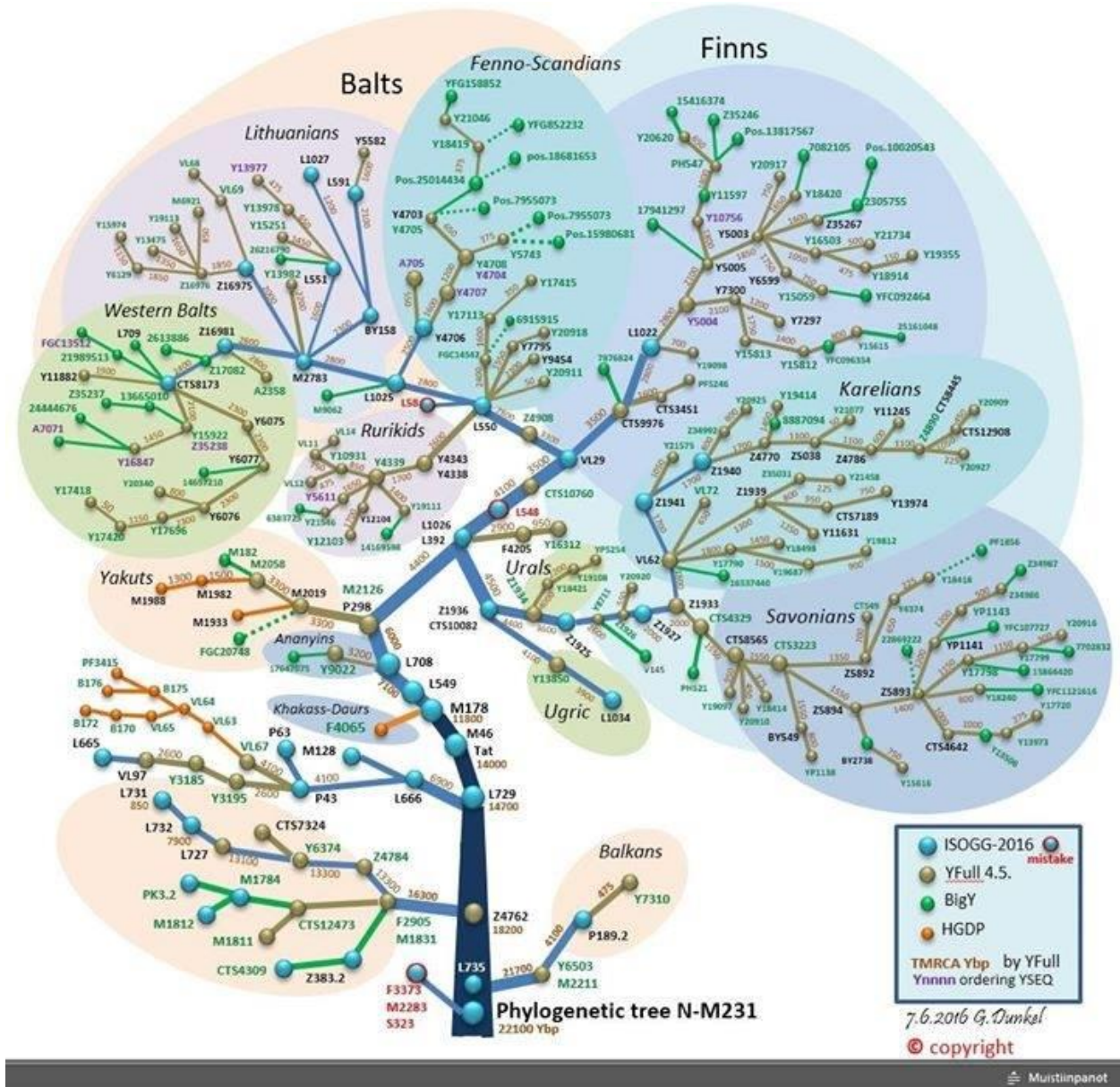


Figure 2.3 Haplotype by G. Dunkel 7.6.2016.

About 95 % of Finns have Finnish as their mother language. Finnish language belongs to Ugric languages, which were spoken near the Ural Mountains. Today Hungarian language is spoken by 10 million people as followed by 5 million Finns, 2 million Russians and one million Estonians.

The Fenno-Ugric languages are still spoken in Hungary, Finland, Estonia and by many North Russian tribes (Figure 2.3). However, Hungarians are not DNA relatives to Finns even their language is a Fenno-Ugric language.



Figure 2.3 Fenno-Ugric languages are still spoken in Hungary, Finland, Russia and Estonia.

### 3 Western Finns

Another tribe coming to Finland was a German tribe Goths, which arrived to Western Finland about 1500 years ago. They were bearing y-haplogroup I1 in their genes and can be still found in their dna. The Goths arrived from Germany and Gotland, which has got its name from the Goths. The Goths were cultivating land and fishing and changed their language to Finnish, because they arrived in Finnish speaking country.

The frequencies of y-haplogroup I1 men are the highest in Western Europe (Table 3.1). Gotland has 50 % frequency, which gives an indication that I1 men were the Goths, who lived there before the spreading of people during the years 500 – 1000. Finland is in the sixth place after Scandinavian countries in I1 frequency (28 %).



Figure 3.1 Western Finns have their origin in North Europe, where a German tribe Goths were living and started their movement to Finland. They belong to haplogroup I1 as their descendants.

Table 3.1 Frequencies of I1 men in Europe (Eupedia).

1 Gotland	50.0%	21 Czech Republic	11.0%	41 Montenegro	6.0%
2 Sweden	37.0%	22 South Germany	10.5%	42 Belarus	5.5%
3 Denmark	34.0%	23 Scotland	9.0%	43 Croatia	5.5%
4 Norway	31.5%	24 Slovenia	9.0%	44 North Greece	5.5%
5 Iceland	29.0%	25 France	8.5%	45 Kosovo	5.5%
6 Finland	28.0%	26 Hungary	8.5%	46 Moldova	5.0%
7 North Germany	18.5%	27 Poland	8.5%	47 Russia	5.0%
8 East Germany	16.5%	28 Serbia	8.5%	48 Galicia	5.0%
9 Netherlands	16.5%	29 Alsace	8.0%	49 Italy	4.5%
10 Tyrol	16.0%	30 Brittany	8.0%	50 Romania	4.5%
11 Germany	16.0%	31 Mordvins (Mord)	8.0%	51 Ukraine	4.5%
12 Estonia	15.0%	32 Tatars	8.0%	52 Bosniaks	4.0%
13 Greenland	14.5%	33 Normandy	7.0%	53 Bulgaria	4.0%
14 England	14.0%	34 Rhône-Alpes	7.0%	54 Crete	4.0%
15 Switzerland	14.0%	35 North Italy	7.0%	55 Tuscany	4.0%
16 Flanders-Artois	13.0%	36 Chuvashs	7.0%	56 Gagauzes	4.0%
17 West Germany	12.5%	37 Slovakia	6.5%	57 Greece	3.5%
18 Austria	12.0%	38 Ireland	6.0%	58 Central Greece	3.5%
19 Belgium	12.0%	39 Latvia	6.0%	59 Sicily	3.5%
20 Wales	12.0%	40 Lithuania	6.0%	60 Extremadura	3.5%



The frequencies of I1 men is the highest (>45 %) near Norwegian and Swedish border near Gothenburg, which has also got its name from the Goths (Figure 3.2).

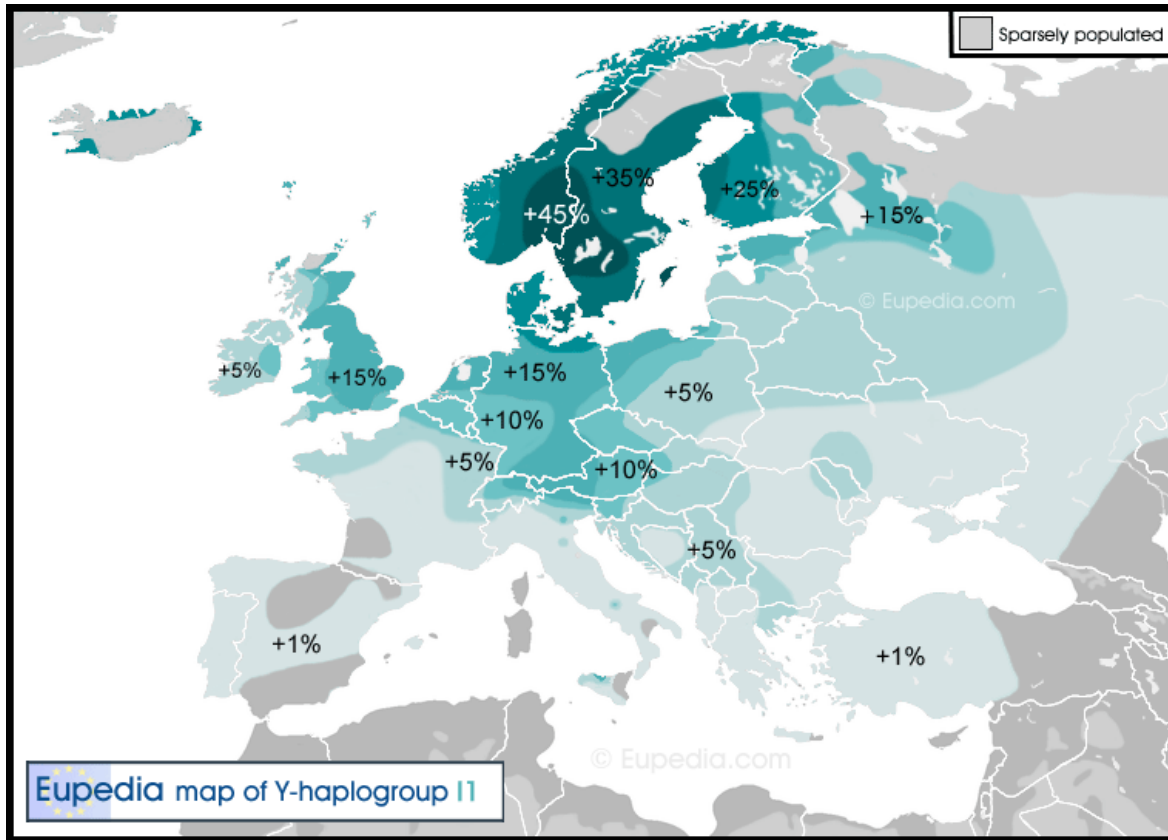


Figure 3.2 Frequencies of haplogroup I1 men in Europe (Eupedia).

During the Viking times (800-1000 A.C.) also some Swedes moved to Finland. There were also Sami people, who were genealogically different from the Finns and Swedes.

After the Swedes invaded to Finland, in about 1150, many Finns had to learn to speak Swedish. Today about 5 % of the Finnish population speak Swedish as their mother language. However, a great part of the Swedish speaking Finns are genealogically of Finnish origin. Many of them, typically priests, soldiers and civil servants, had to convert only their language in Swedish. Thus their descendants had Swedish as their mother language. Swedish has been an obligatory language in schools of Finland since the first schools started in Finland.