



# MOVING FROM THE 50TH TO THE 75TH PERCENTILE





# WHAT CAUSED US TO LOOK INTO THIS?

**VALD RECENTLY PUBLISHED NORMATIVE REPORTS ACCESSIBLE TO CLIENTS AND WE CAME TO AN INTRIGUING THOUGHT.**

**VALD**

**IF SOMEONE FOUND THEMSELVES IN THE 75TH  
PERCENTILE AS AN ADULT AND MAINTAINED  
THAT STRENGTH, WHERE WOULD THEY BE IN  
THEIR LATTER (SENIOR) YEARS?**

# DEFINITIONS ACCORDING TO THE VALD REPORT



## **ADULT**

20 - 50 years old



## **SENIOR**

Greater than 50 years old



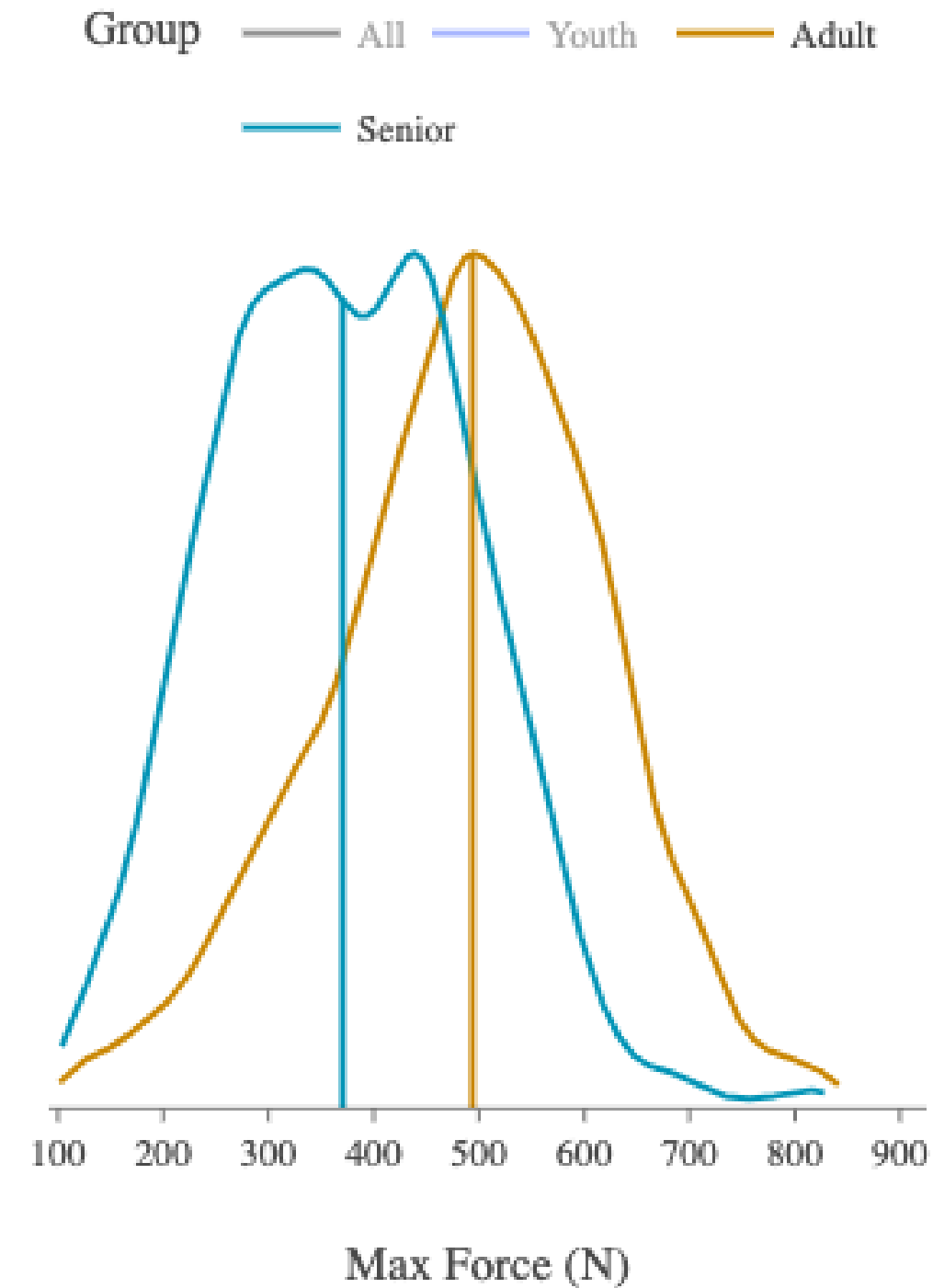
## **EXERCISE SELECTION**

Each of the movement selected are single joint exercise movements, thus eliminating the idea that previous experience or expertise may play a role in altering the measurement.

# OUR METHODS FOR ANALYSIS

Utilizing VALDs interactive report we are easily able to distinguish where a specific measurement lands someone when comparing them to others within their cohort but also across others as well.

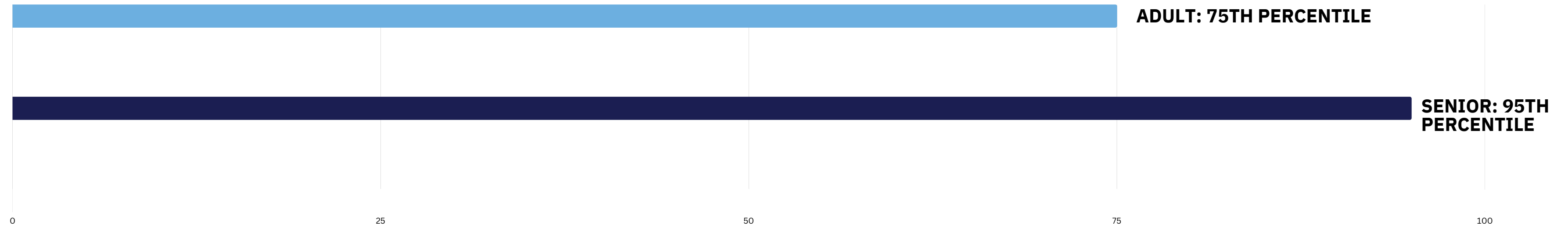
Again, our goal is to understand, if one scores within the 50th percentile (average) as an adult, and they maintain that strength, how much better off would they be as a senior?



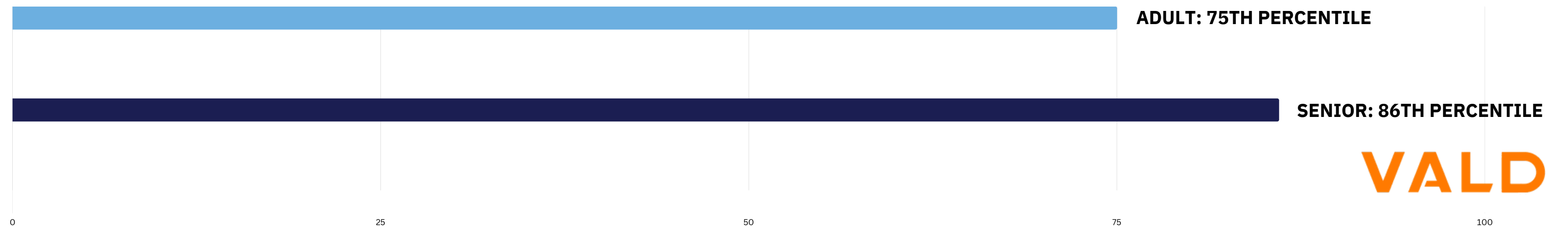
# FEMALE - GRIP SQUEEZE

The charts show the percentile rankings if one maintains their strength as an adult. As an adult they are within the 50th percentile, but where does that place them if we fast forward to senior years?

## MAX FORCE



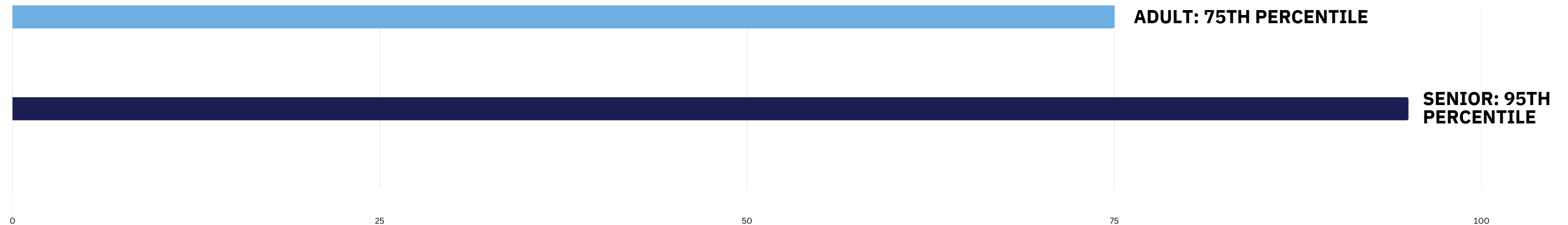
## RATE OF FORCE DEVELOPMENT



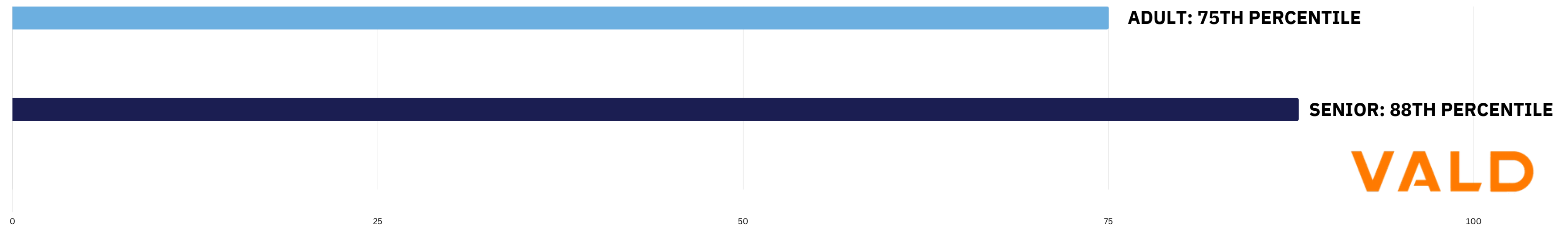
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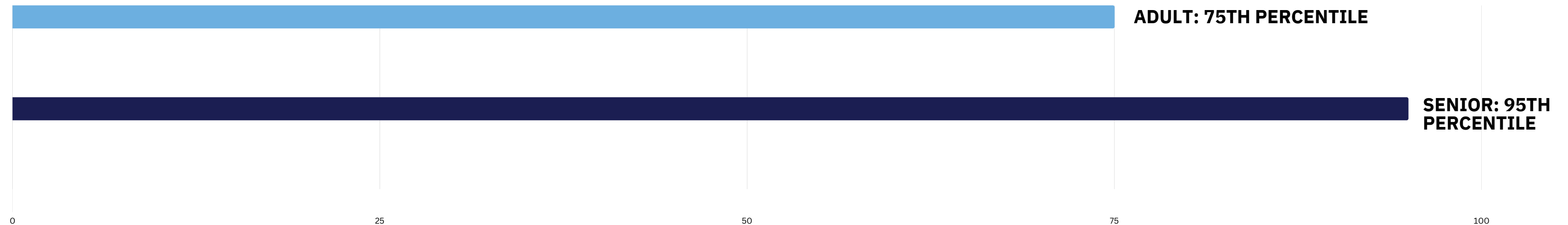
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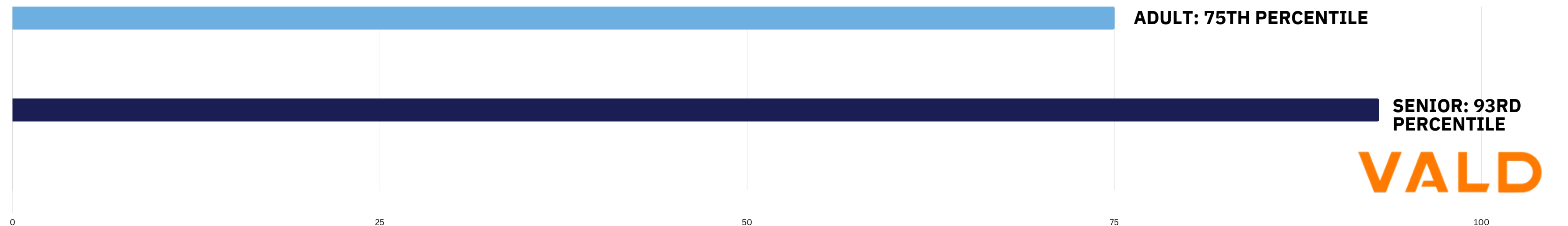
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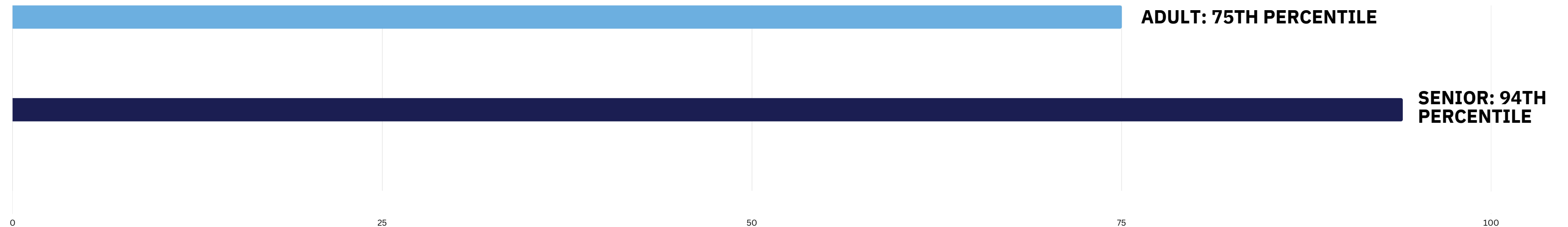




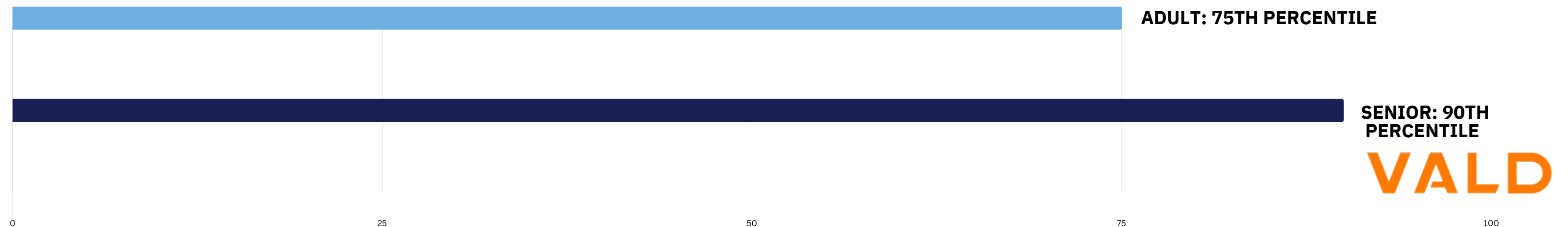
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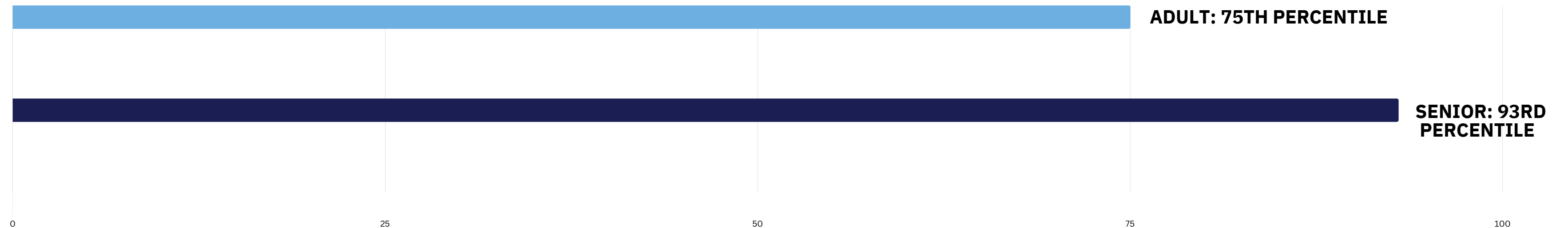
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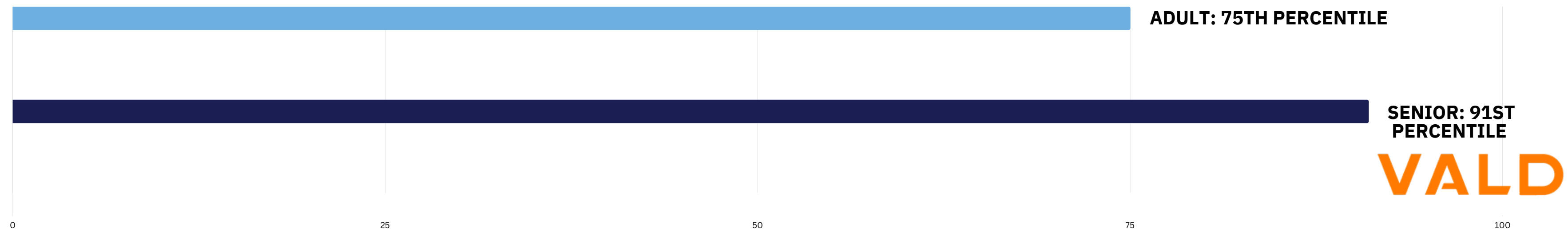
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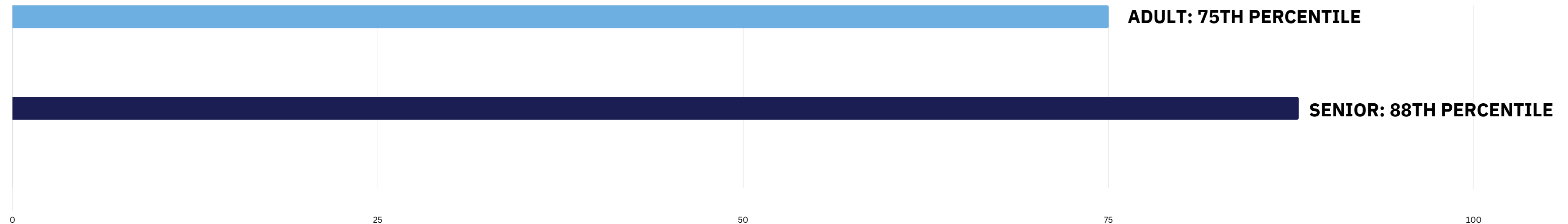
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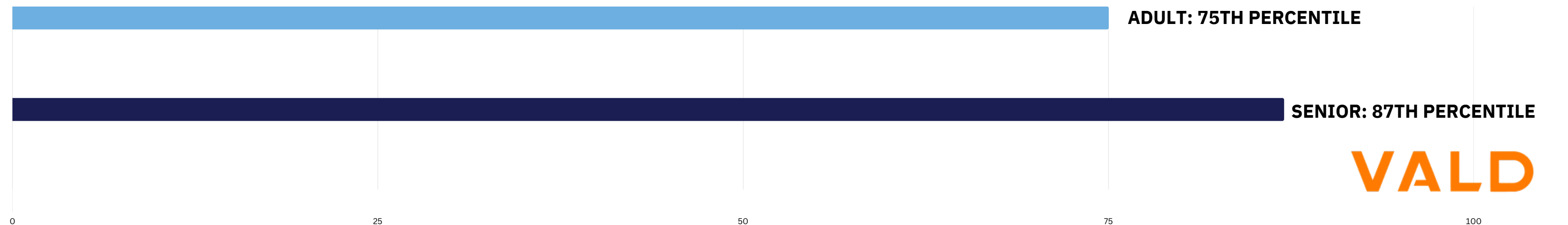
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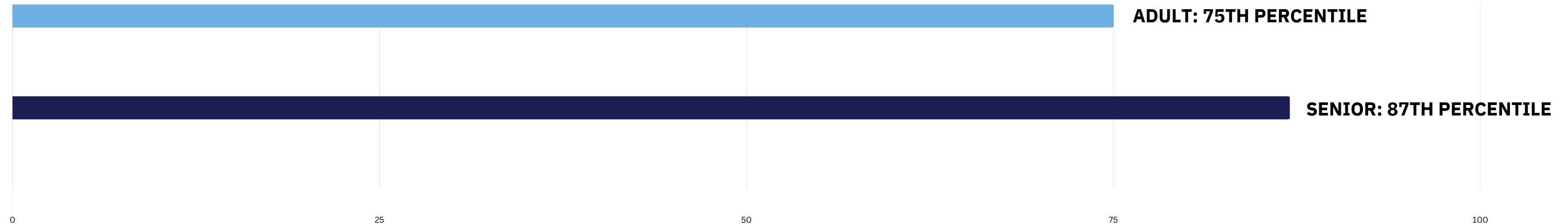
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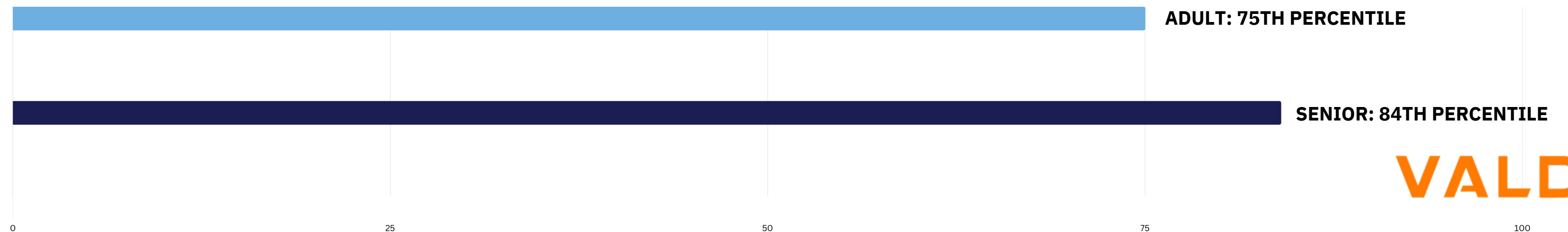
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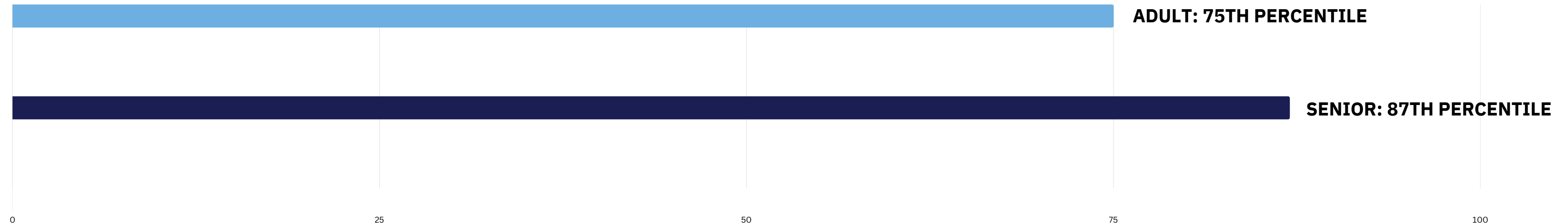




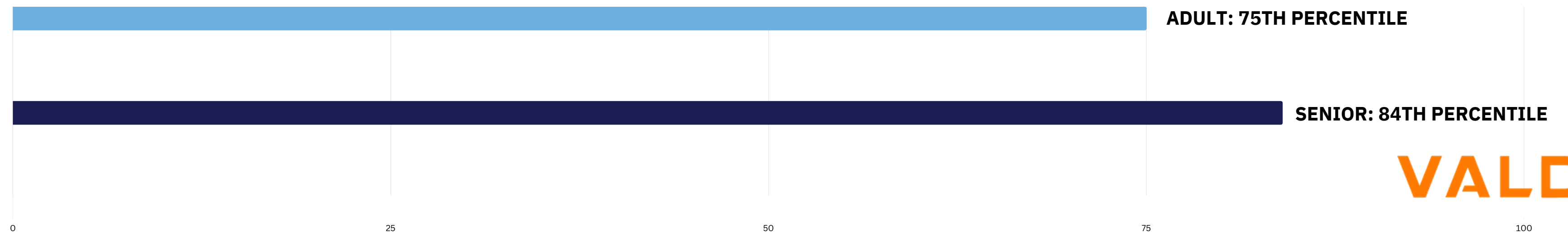
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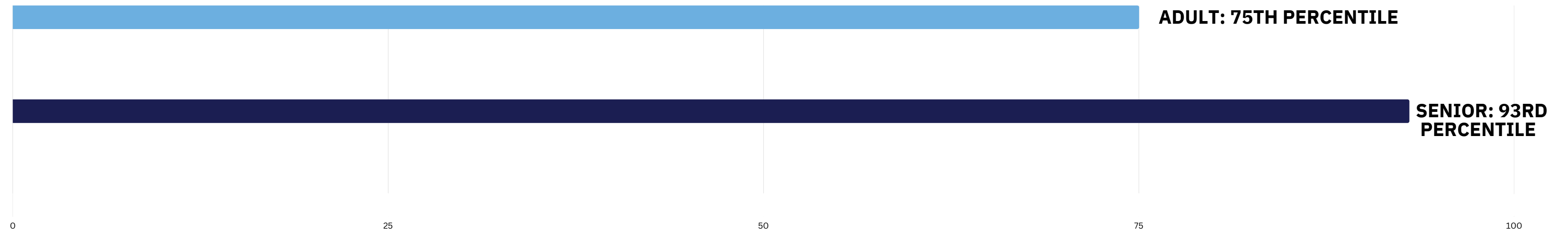
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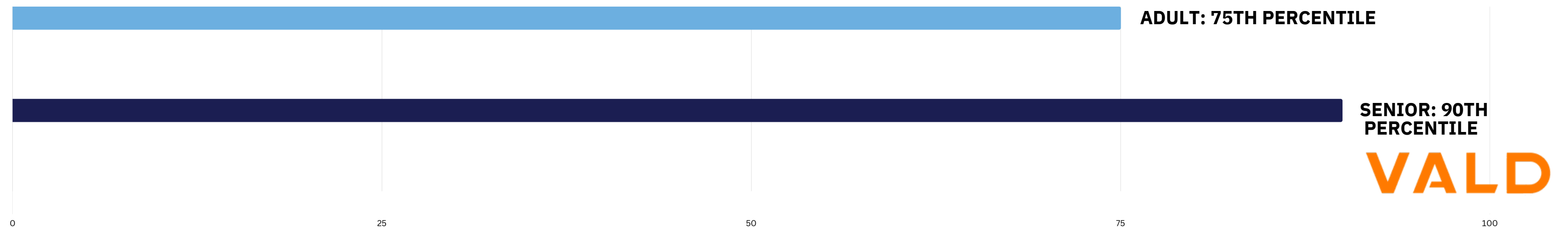
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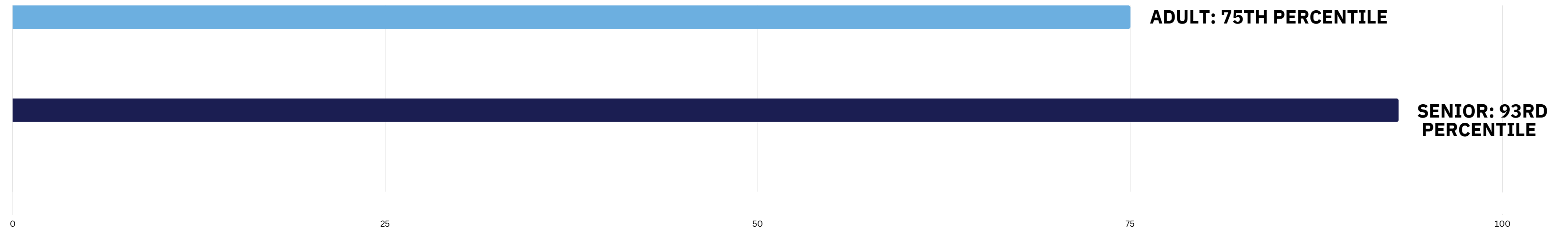
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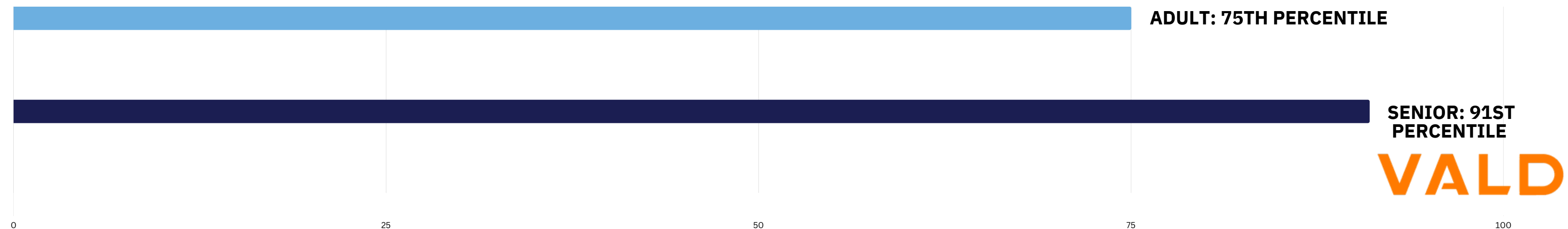
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## MAX FORCE



## RATE OF FORCE DEVELOPMENT



# 50TH VS 75TH PERCENTILE - FEMALE

Max Force

Movement	Adult 50th	Adult 75th	Difference
Grip Squeeze	84th	95th	11%
Knee Extension	82nd	95th	13%
Knee Flexion	78th	93rd	15%
Hip Abduction - SL	74th	87th	13%
Hip Abduction - Supine	74th	93rd	19%

Indicates the percentile ranking as a senior\*\*



# 50TH VS 75TH PERCENTILE - FEMALE

Rate of Force Development

Movement	Adult 50th	Adult 75th	Difference
Grip Squeeze	68th	86th	18%
Knee Extension	80th	93rd	13%
Knee Flexion	79th	91st	12%
Hip Abduction - SL	66th	84th	18%
Hip Abduction - Supine	73rd	90th	17%

Indicates the percentile ranking as a senior\*\*

# 50TH VS 75TH PERCENTILE - MALE

Max Force

Movement	Adult 50th	Adult 75th	Difference
Grip Squeeze	84th	95th	11%
Knee Extension	69th	94th	25%
Knee Flexion	68th	88th	20%
Hip Abduction - SL	73th	87th	14%
Hip Abduction - Supine	80th	93rd	13%

Indicates the percentile ranking as a senior\*\*

# 50TH VS 75TH PERCENTILE - MALE

Rate of Force Development

Movement	Adult 50th	Adult 75th	Difference
Grip Squeeze	69th	88th	19%
Knee Extension	71st	90th	19%
Knee Flexion	70th	87th	17%
Hip Abduction - SL	65th	87th	22%
Hip Abduction - Supine	80th	93rd	13%

Indicates the percentile ranking as a senior\*\*

# CONCLUSIONS

## ● MOVING FROM 50TH TO 75TH PERCENTILE AS AN ADULT

While progressing from the 50th percentile to the 75th percentile represents a 25-point difference, this disparity was not observed among seniors. However, the findings did reveal that improvements during adulthood would lead to an average 16-point difference in senior performance. We firmly believe that pursuing such improvements is essential as it increases the chances of better performance in later years. Additionally, it provides a cushion in case of events that may cause a significant loss of muscle, such as an extended hospitalization.



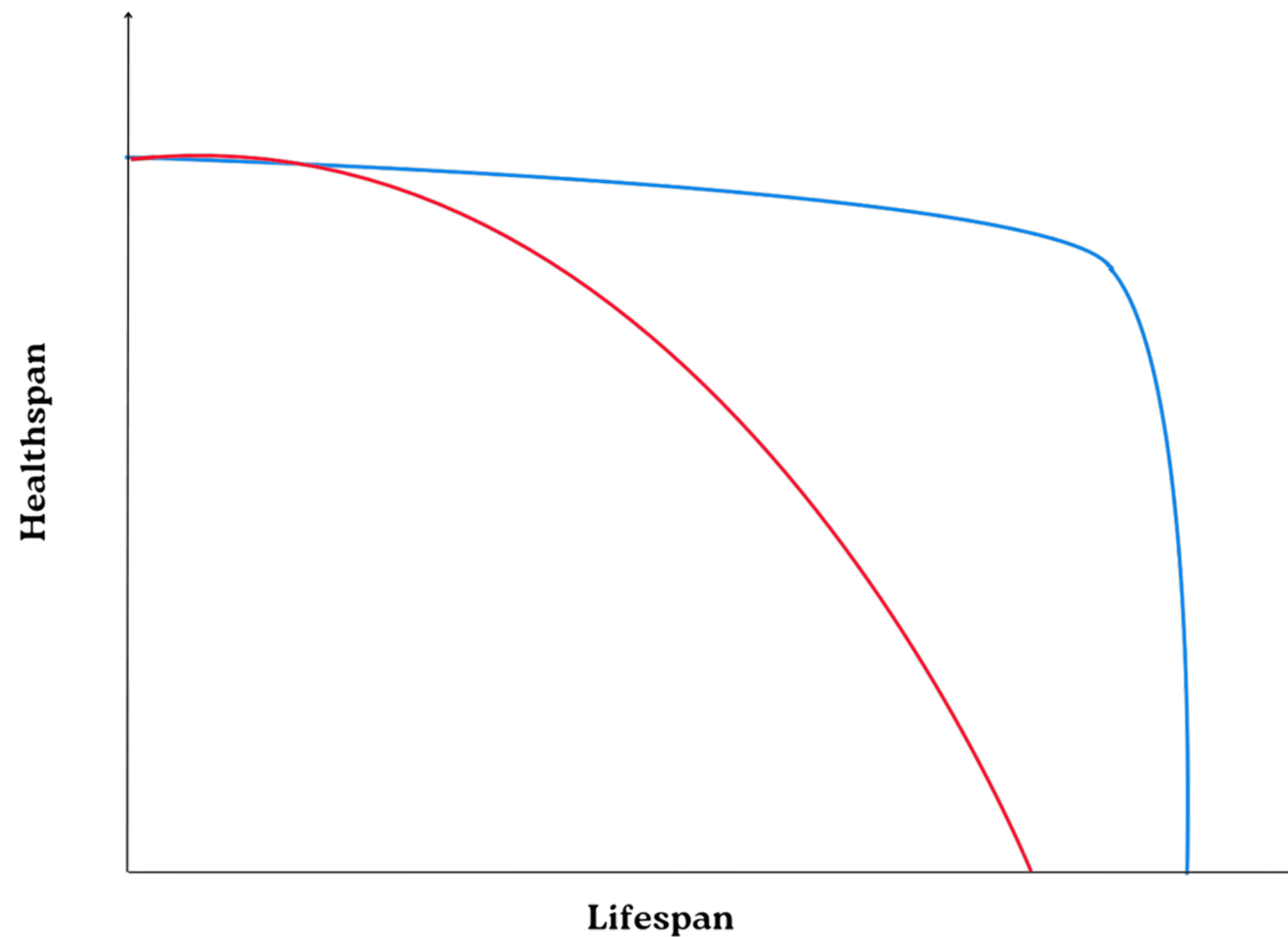
# CONCLUSIONS

## ● MAINTENANCE IS KEY

It is not necessary to be in the 99th percentile as an adult in order to experience substantial improvement in senior years. Even maintaining strength at the 50th percentile has been proven to be beneficial. However, preparing oneself for optimal success as a senior involves building the highest level of fitness capacity during adulthood.

# CONCLUSIONS

## ● SQUARING THE CURVE



The blue line represents maintenance of health, and in this specific case can be directly related to strength. Our goal is to maintain our strength throughout adulthood into the latter years so we can continue doing the things we love.