

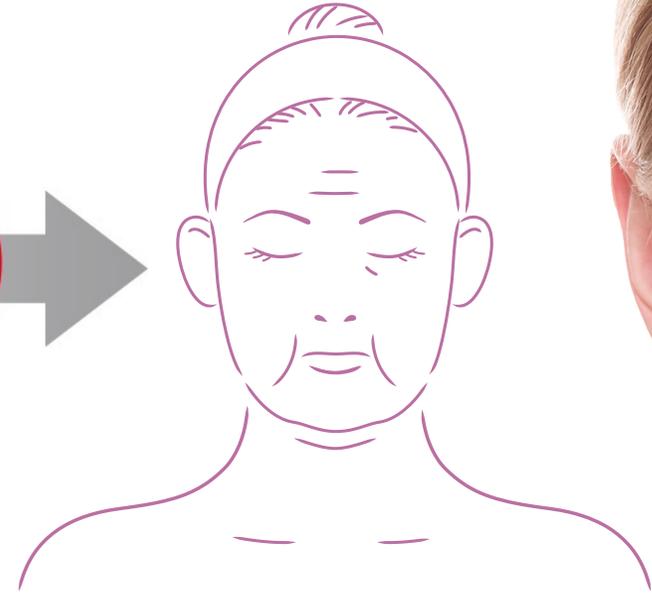
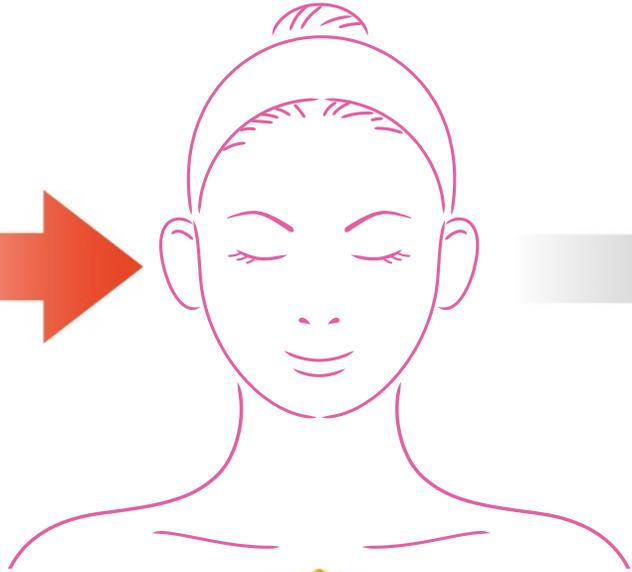
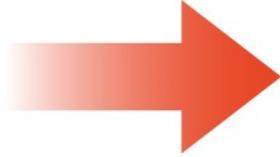
ANTI  
AGEING

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Pentide-NMN

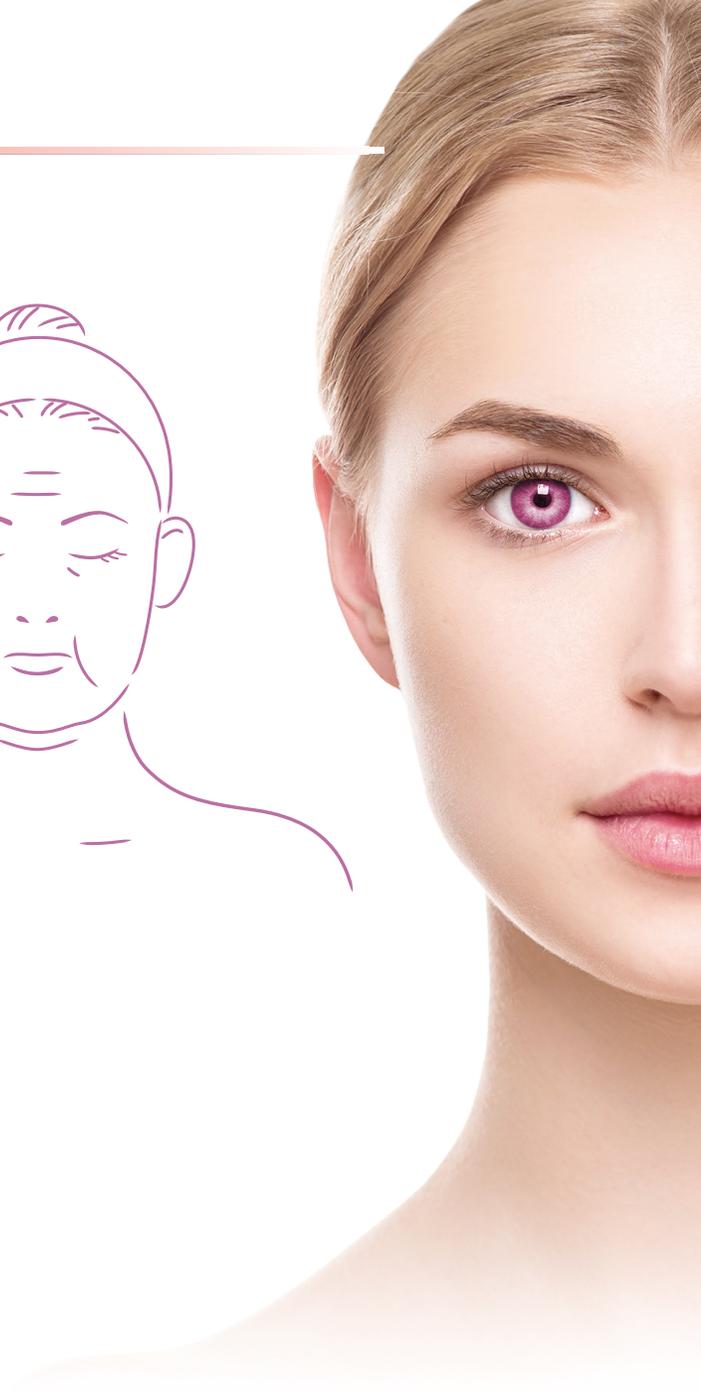


NMN



NAD+

サーチュイン  
遺伝子活性化



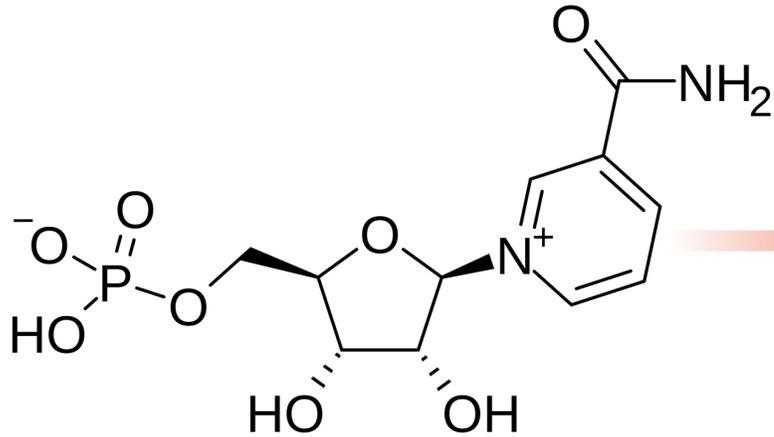


<https://news.wisc.edu/calorie-restriction-lets-monkeys-live-long-and-prosper/>

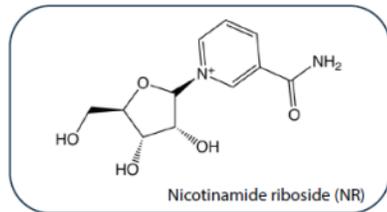
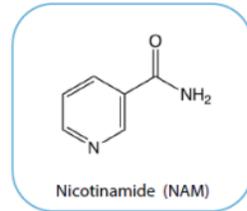
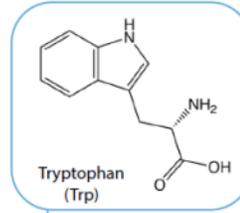
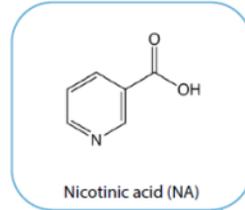


# NMN

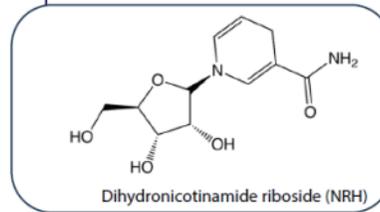
ニコチンアミドモノヌクレオチド



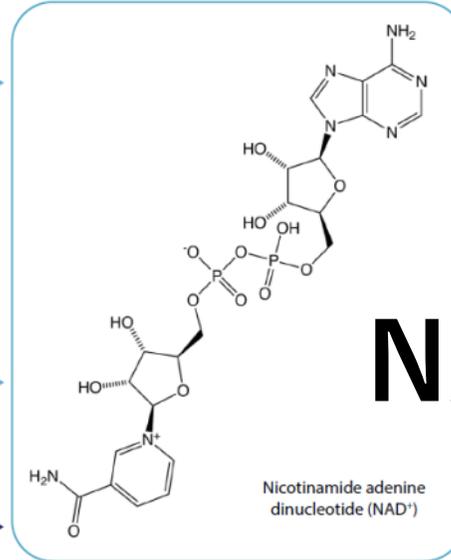
Non-ribosylated precursors



Ribosylated precursors



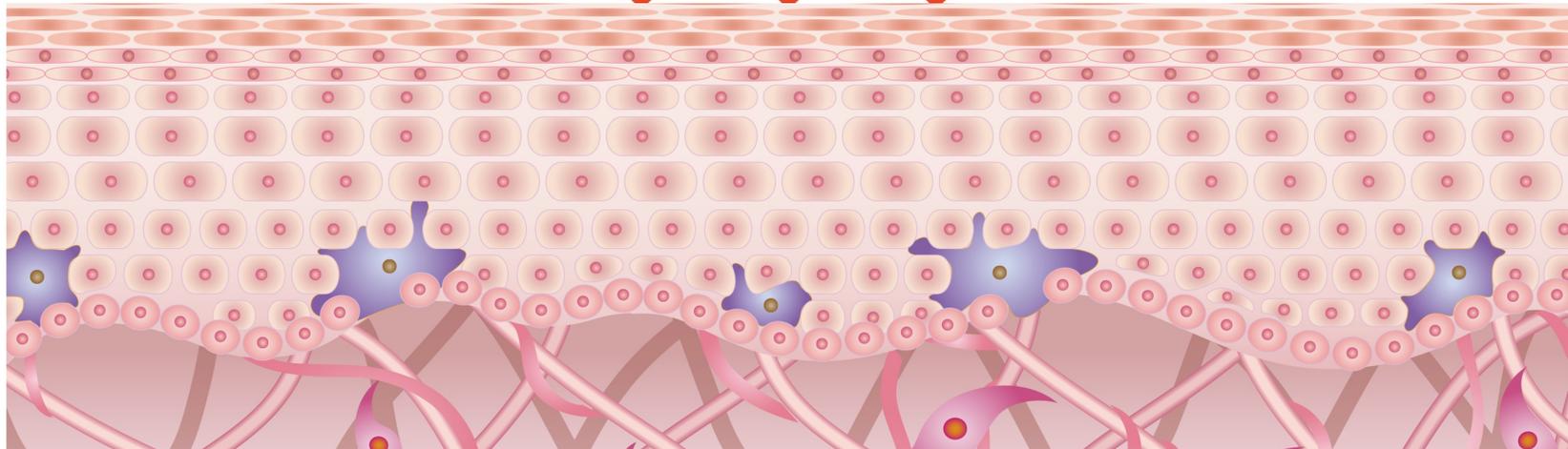
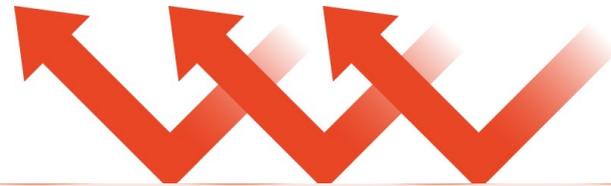
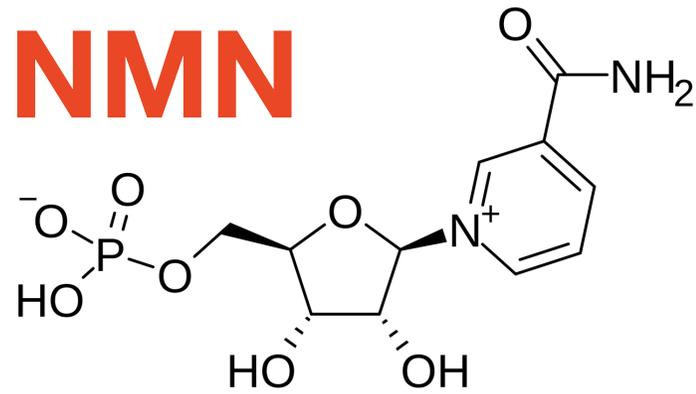
NMN



NAD<sup>+</sup>

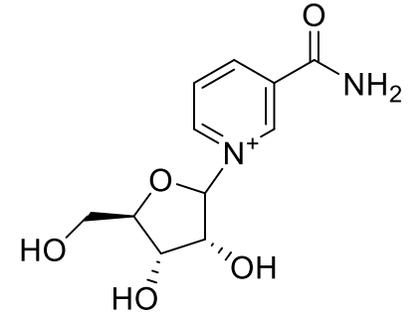


NMNの化粧品としての問題点

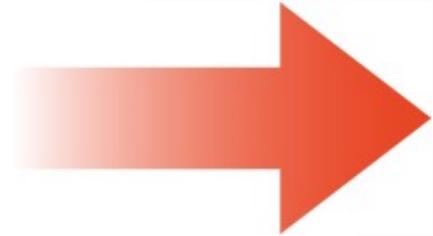


# NMN = CPP

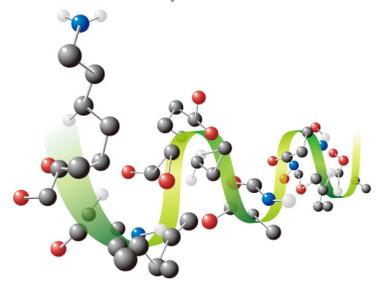
NMN (NR)



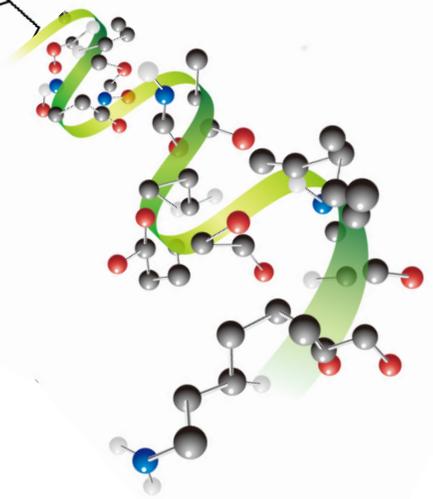
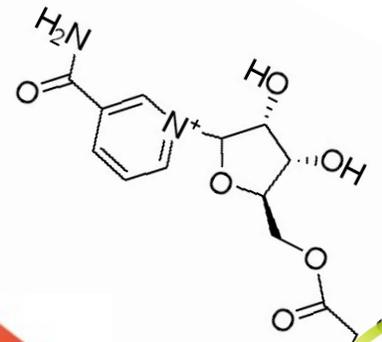
+



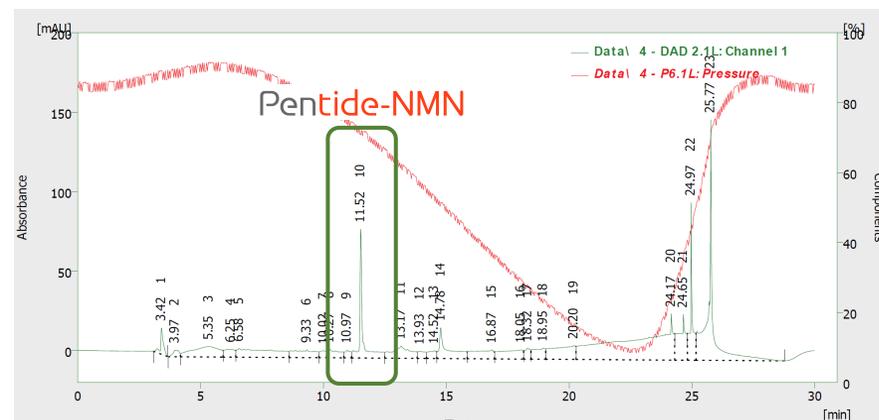
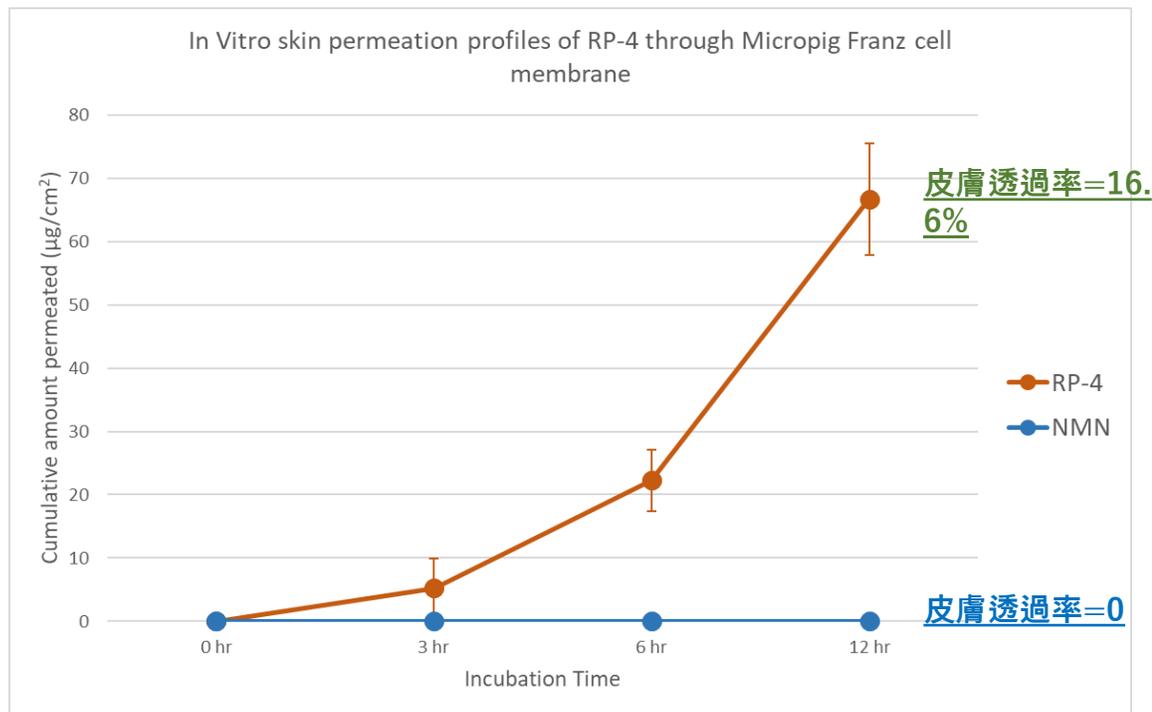
浸透型ペプチド  
(CPP)



皮膚を透過し  
細胞に取り込まれる  
NMN誘導体



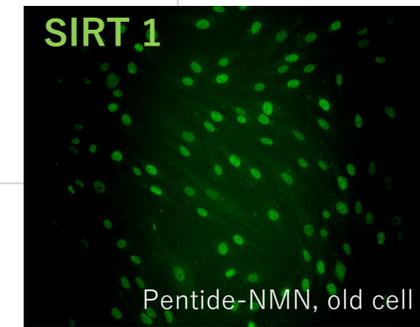
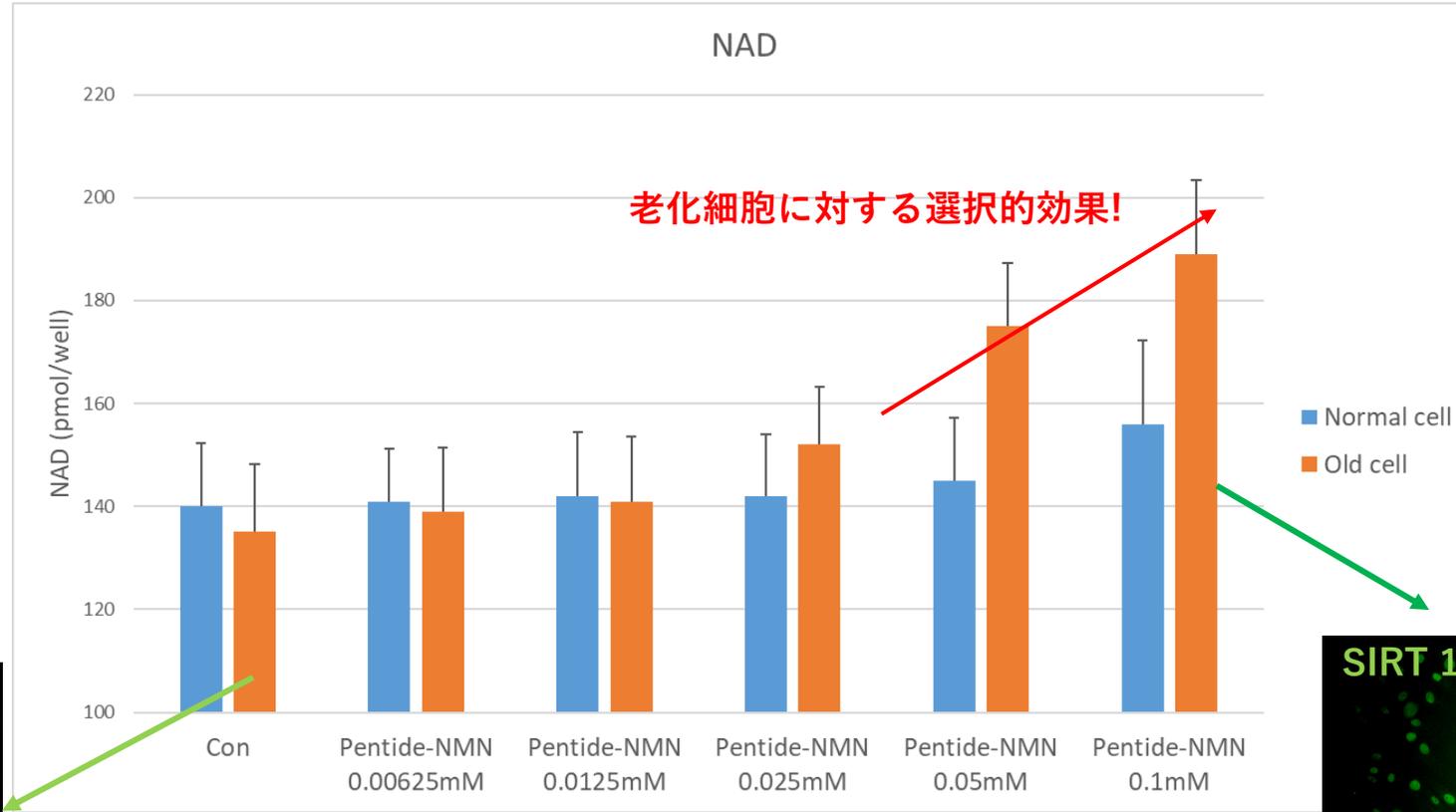
## ペプチド-NMNの皮膚透過率試験



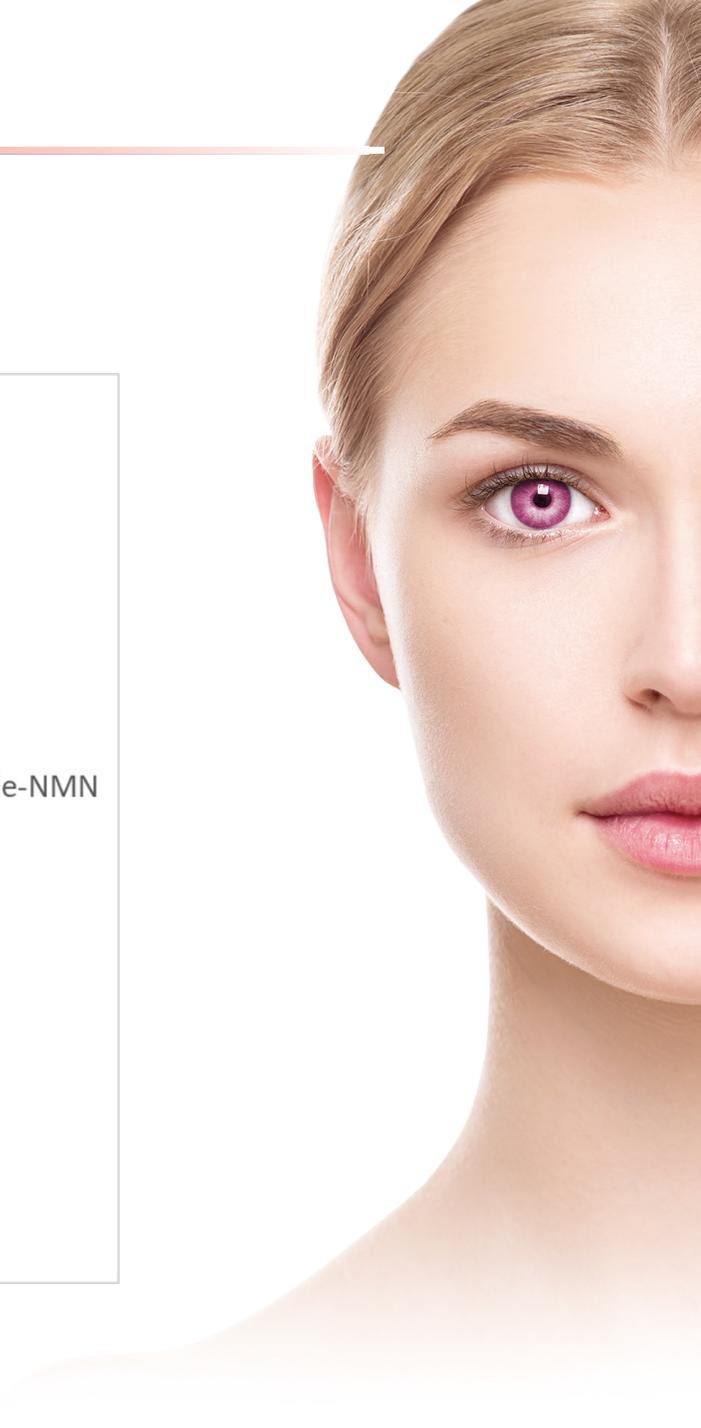
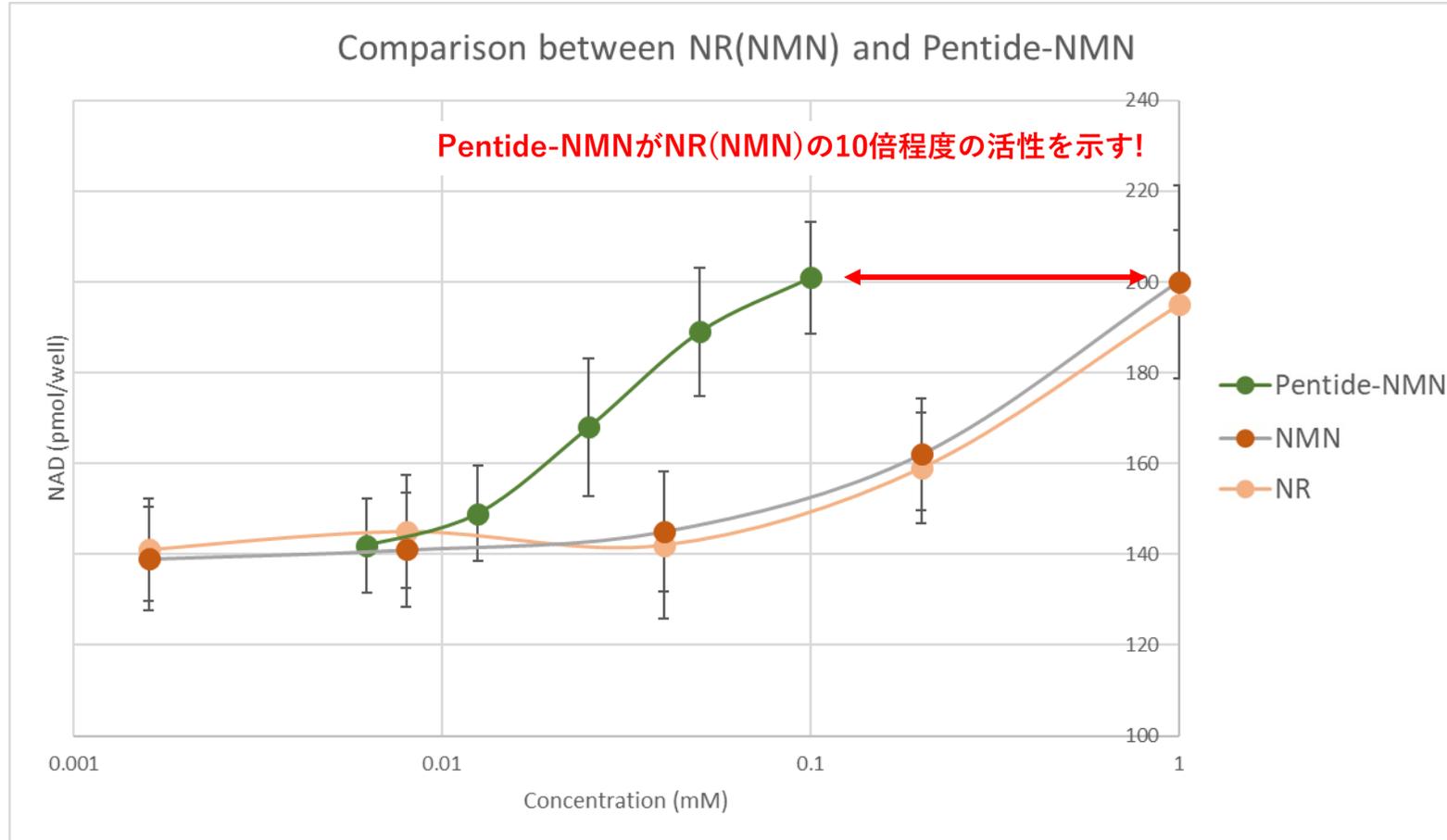
- Pentide-NMNの皮膚透過度を確認するために、Franz Diffusion Cell Assayを利用したIn Vitro皮膚透過実験を行う。
- NMNは試験期間の12時間まで皮膚透過率を確認できなかったが、Pentide-NMNは16.6%の優秀な皮膚透過率特性を示した。



## Petide-NMNのヒト老化線維芽細胞に対するNAD誘導効果

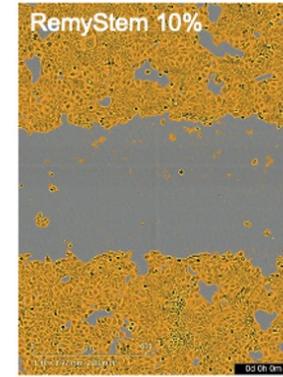
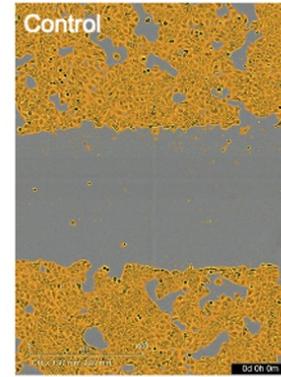
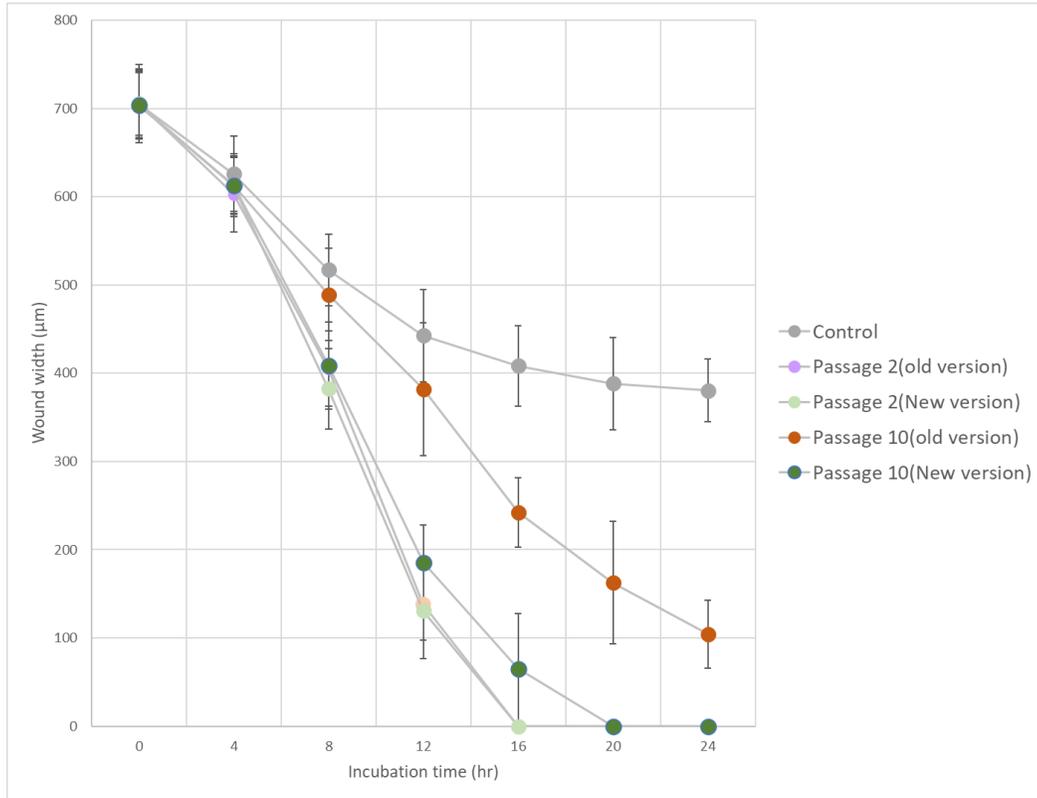


## ペプチド-NMNとNMN・NRの細胞活性比較



## ペンタイド-NMNを培地に使用したときの脂肪由来幹細胞のアンチエイジング効果

### In Vitro Wound Healing Assay



Passage 10 の細胞においても passage 2 の細胞と同レベルの細胞活性を維持している。

